

3.14 TRANSPORTATION/TRAFFIC

This EIR section analyzes the potential for adverse impacts on existing transportation and traffic conditions resulting from implementation of the proposed project. The Initial Study (Appendix A) identified the potential for impacts associated with increased number of vehicle trips and traffic congestion, exceeding established levels of service of the county congestion management agency, increased hazards due to design features, emergency access, and parking capacity. In addition, the Initial Study identified project consistency with adopted policies supporting alternative transportation as less than significant; however, this section will address the project's compliance with alternative transportation policies of the General Plan and the Downtown Specific Plan. Issues scoped out from detailed analysis in the EIR include changes in air traffic patterns as a result of the proposed project. Data used to prepare this section were taken from the City's General Plan Transportation Element and the Traffic Impact Analysis Report prepared for the project site (Appendix H). Full bibliographic entries for all reference materials are provided in Chapter 7 (References) of this document.

The traffic study includes analysis in Year 2008 and 2020 in order to assess the future conditions upon completion of the project and the long-term effect of the project in conjunction with other growth within the City. At the time the traffic study was completed, project completion was estimated to occur in 2008, although estimated construction completion has been revised to 2010 under conservative assumptions. The impacts that are identified to occur in 2008 can reasonably be anticipated to be similar in 2010, due to the traffic growth forecasts and 2008 projected levels of service with and without the project. The 2008 analysis does not identify any intersections or roadway segments that are minimally below thresholds of significance, which may be significant under year 2010 conditions. Therefore, the analysis of 2008 traffic conditions remains applicable to the proposed project.

3.14.1 Existing Conditions

This section provides an assessment of existing conditions in the project study area, including a description of the street and highway system, traffic volumes on these facilities, and operating conditions of the selected intersections.

Existing Street Network

Regional Access

The project site is located in the southerly area of the City of Huntington Beach adjacent to PCH and approximately one-quarter mile west of Beach Boulevard. Regional access to this area is provided by the San

Diego Freeway (I-405) and PCH (SR-1), which run in a northwest to southeast orientation in the vicinity of the project, and Beach Boulevard (SR-39), which runs in a north to south orientation to the east of the project site. The San Diego Freeway, which is located approximately five miles north of the project site, provides north/south access through the City of Los Angeles and connects the Westside with the San Fernando Valley to the north and the South Bay area to the south. The primary access to the project site from the I-405 is via an interchange at Beach Boulevard. PCH borders the site on the southwest, and is a major highway that extends through Orange County and links Huntington Beach with the neighboring communities of Seal Beach, Long Beach, Costa Mesa, and Newport Beach.

Local Access

Principal local arterials, which are streets that carry the majority of traffic traveling through the city and are generally developed as commercial corridors, that serve the project site include Beach Boulevard, Main Street, First Street, Huntington Street, Atlanta Avenue, and Pacific View Avenue.

The key local area streets serving the project site are described below:

Pacific Coast Highway (PCH), also known as State Route 1, is designated as a Major Arterial Highway in the City's General Plan Circulation Element southeast of Goldenwest Street, and the Caltrans Route Concept Report and the County of Orange Master Plan of Arterial Highways (MPAH) sets the standards for this roadway. PCH provides both regional and local access to the project site. PCH is currently configured as a six-lane arterial south of Beach Boulevard, and is striped for six lanes from midway between Huntington Street and First Street to 6th Street, which includes the northwesterly half of the project frontage. Northwest of 6th Street, PCH is configured as a four-lane arterial. Metered parking is currently provided on both sides of PCH except along the southwesterly half of the project frontage and along the southwest side of PCH, which is improved with a transit turnout for bus layovers and boardings. The speed limit along PCH varies from 35 miles per hour (MPH) to 50 MPH in the project vicinity. PCH currently performs as a four-lane Expressway between Warner Avenue and Seapoint Avenue.

Beach Boulevard, also known as State Route 39, is designated as a Superstreet/Smartstreet on the Caltrans Route Concept Report and the County of Orange MPAH. Beach Boulevard provides both regional and local access to the project site and currently consists of six lanes between PCH and Ellis Avenue/Main Street and eight lanes north of Ellis Avenue/Main Street. Beach Boulevard begins at PCH in Huntington Beach and continues northward through the study area and cities of Westminster, Garden Grove, Anaheim, Buena Park, and La Mirada before terminating at Whittier Boulevard in La Habra.

Atlanta Avenue is designated as a four-lane Primary Arterial Highway in the City's General Plan Circulation Element and Orange County MPAH. The City's General Plan also designates this street as a Landscape Corridor. Atlanta Avenue originates at First Street and continues easterly to its terminus at the Santa Ana River. Atlanta Avenue is currently a two-lane roadway along the project frontage and becomes four lanes from Delaware Street to the Santa Ana River. Parking is permitted along the south side of Atlanta Avenue adjacent to the existing single-family residences and is restricted along the project frontage.

Main Street is designated as a four-lane Primary Arterial Highway in the City's General Plan Circulation Element and Orange County MPAH north of 17th Street, and extends from PCH to Beach Boulevard. Main Street is currently a two-lane roadway between PCH and Adams, a four-lane roadway between Adams Avenue and Yorktown Avenue, and a six-lane roadway between Yorktown Avenue and Beach Boulevard. Within the Main Street segment between PCH and Adams, angle parking is located in the Downtown area between PCH and 6th Street.

First Street is designated as a four-lane Primary Arterial Highway in the City's General Plan Circulation Element and Orange County MPAH, and extends from PCH to Atlanta Avenue/Orange Avenue. First Street is currently a two-lane roadway and parking is permitted along both sides. The City's General Plan also designates this street as a Landscape Corridor.

Huntington Street is designated as a four-lane Secondary roadway from PCH to Pacific View Avenue and a local street north of Pacific View in the City's General Plan Circulation Element and Orange County MPAH. Huntington Street originates at PCH and continues northerly to its terminus at Garfield Avenue. Huntington Street is currently a two-lane roadway with primarily residential frontage north of Atlanta Avenue. Parking is not permitted along either side of Huntington Street adjacent to the project frontage.

Delaware Street is designated as a four-lane Secondary roadway in the City's General Plan Circulation Element and Orange County MPAH, and currently extends from just south of Atlanta Avenue to Taylor Drive north of Ellis Avenue. Delaware Street currently varies between a two-lane roadway and four-lane roadway with primarily residential frontage. Parking is permitted along both sides of Delaware Street.

Pacific View Avenue is designated as a four-lane Primary Arterial Highway in the City's General Plan Circulation Element and Orange County MPAH. The City's General Plan also designates this street as a Landscape Corridor. Pacific View Avenue existed only from Huntington Street to approximately 500 feet east along the existing Waterfront Hilton project when the counts were conducted for the proposed project's Traffic Impact Analysis. Pacific View Avenue has been extended easterly to Beach Boulevard in conjunction with current development of the Hyatt Regency Resort, and will be extended westerly to First

Street in conjunction with the proposed project. Parking is currently prohibited along the entire length of Pacific View Avenue.

Figure 3.14-1 illustrates the existing roadway conditions and intersection controls in the project area, as described above.

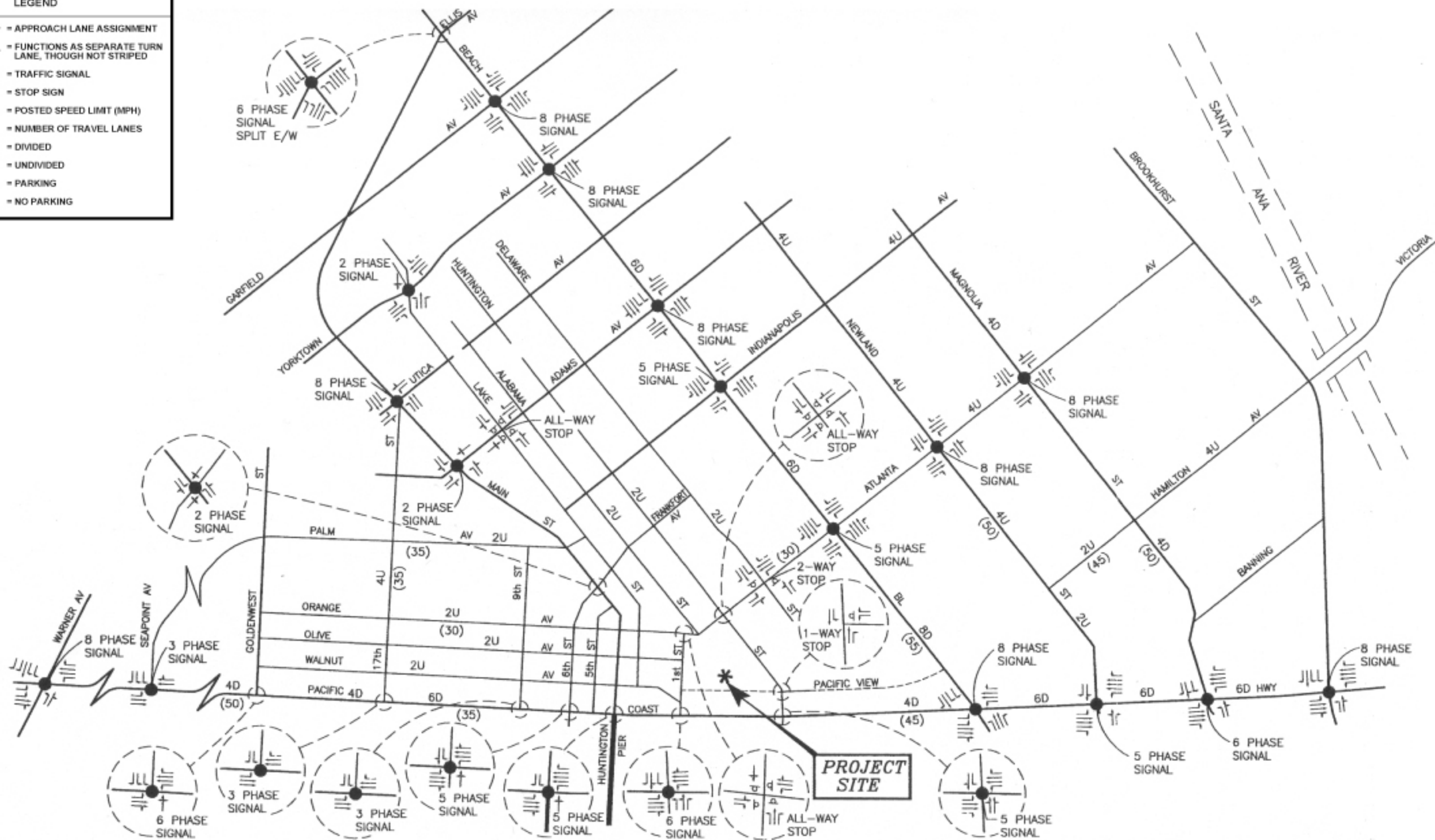
Study Area Intersections

An inventory of key area roadways and intersections for the proposed project vicinity was performed during the preparation of the Traffic Impact Analysis Report. The traffic report analyzed existing and future peak hour traffic conditions upon completion of the proposed project in Year 2008 at the following thirty-two key intersections (thirty of which currently exist) and twenty-five roadway segments (twenty-four of which currently exist):

Year 2008 Study Intersections

- Goldenwest Street at PCH
- 17th Street at PCH
- 9th Street at PCH
- 6th Street at PCH
- Main Street at 6th Street
- Main Street at PCH
- First Street at Atlanta Avenue
- First Street at PCH
- Huntington Street at Atlanta Avenue
- Delaware Street at Atlanta Avenue
- Huntington Street at PCH
- Huntington Street at Pacific View Avenue
- Beach Boulevard at Adams Avenue (Congestion Management Plan Intersection)
- Beach Boulevard at Indianapolis Avenue
- Beach Boulevard at Atlanta Avenue
- Beach Boulevard at PCH (Congestion Management Plan Intersection)
- Newland Street at Atlanta Avenue

LEGEND	
	= APPROACH LANE ASSIGNMENT
	= FUNCTIONS AS SEPARATE TURN LANE, THOUGH NOT STRIPED
	= TRAFFIC SIGNAL
	= STOP SIGN
(XX)	= POSTED SPEED LIMIT (MPH)
2	= NUMBER OF TRAVEL LANES
D	= DIVIDED
U	= UNDIVIDED
P	= PARKING
NP	= NO PARKING



Not to Scale

SOURCE: Linscott Law & Greenspan 2003a



EIP
ASSOCIATES

FIGURE 3.14-1
Existing Roadway Conditions and Intersection Controls

City of Huntington Beach • Pacific City EIR

- Newland Street at PCH
- Magnolia Street at PCH
- Magnolia Street at Atlanta Avenue
- PCH at Seapoint Avenue
- PCH at Warner Avenue (Congestion Management Plan Intersection)
- PCH at Brookhurst Avenue
- Main Street at Adams Avenue
- Main Street at Utica Avenue
- Lake Street at Adams Avenue
- Lake Street at Yorktown Avenue
- Beach Boulevard at Yorktown Avenue
- Beach Boulevard at Garfield Avenue
- Newland Street at Ellis Avenue/Main Street
- First Street at Pacific View Avenue (Future)
- Beach Boulevard at Pacific View Avenue (Future)

Year 2008 Study Roadway Segments (Links)

- PCH, from Warner Avenue to Seapoint Avenue
- PCH, from Seapoint Avenue to Goldenwest Street
- PCH, from Goldenwest Street to 6th Street
- PCH, from 6th Street to First Street
- PCH, from First Street to Huntington Street
- PCH, from Huntington Street to Beach Boulevard
- PCH, from Beach Boulevard to Newland Street
- PCH, from Magnolia Street to Brookhurst Street
- Beach Boulevard, from PCH to Atlanta Avenue
- Beach Boulevard, from Atlanta Avenue to Indianapolis Avenue
- Beach Boulevard, from Indianapolis Avenue to Adams Avenue
- Beach Boulevard, from Adams Avenue to Yorktown Avenue

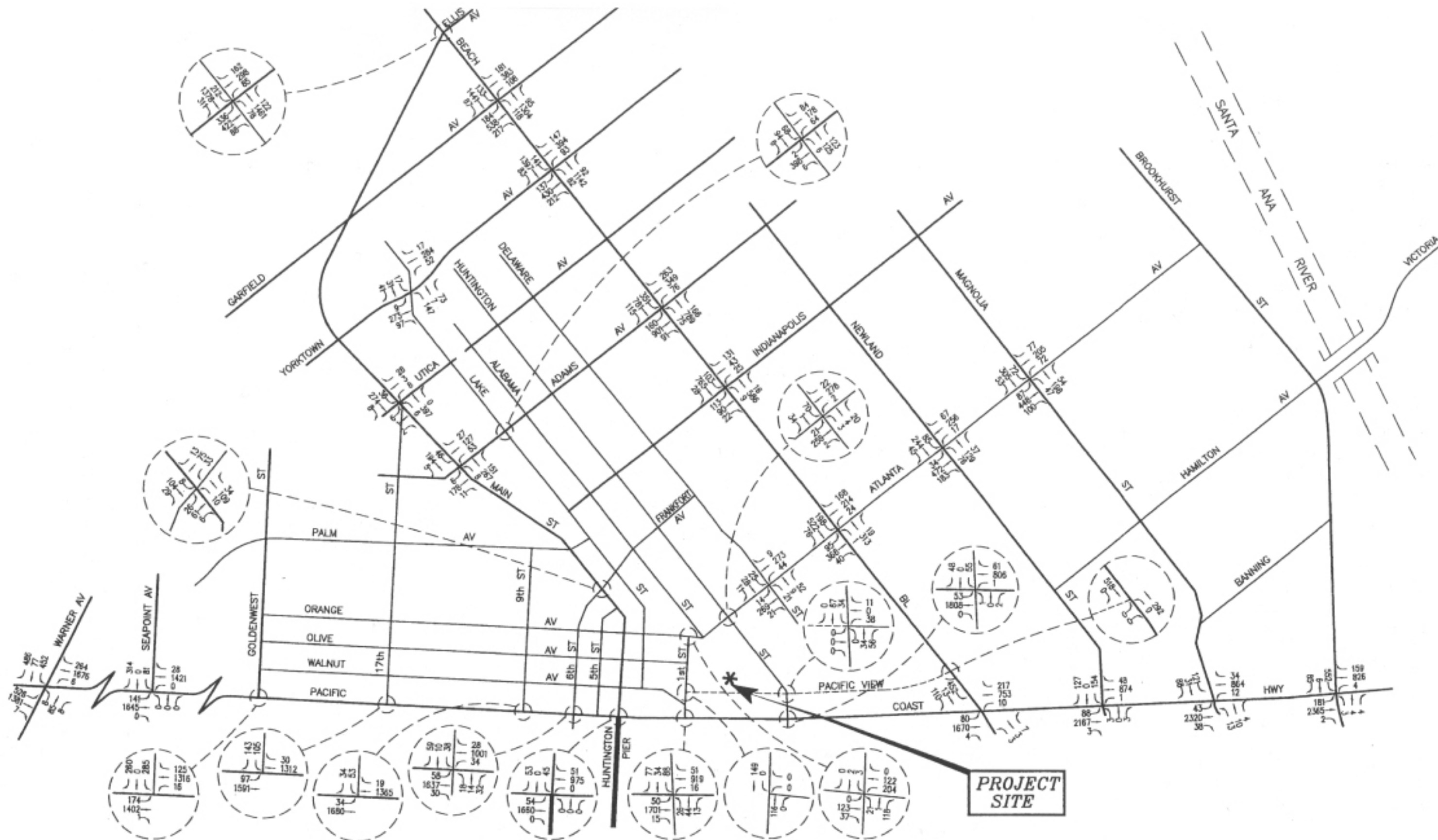
- Beach Boulevard, from Garfield Avenue to Main Street
- Atlanta Avenue, from Beach Boulevard to Delaware Street
- Atlanta Avenue, from First Street to Huntington Street
- Atlanta Avenue, from Huntington Street to Delaware Street
- First Street, from Orange Avenue to PCH
- Huntington Street, from Atlanta Avenue to Pacific View Avenue
- Main Street, from Palm Avenue to Adams Avenue
- Lake Street, from Indianapolis Avenue to Adams Avenue
- Lake Street, from Adams Avenue to Yorktown Avenue
- Adams Avenue, from Beach Boulevard to Newland Street
- Indianapolis Avenue, from Beach Boulevard to Newland Street
- Atlanta Avenue, from Beach Boulevard to Newland Street
- Pacific View (future with project), from First Street to Huntington Street

Existing Traffic Volumes and Level of Service

Existing Area Traffic Volumes

The existing A.M. and P.M. peak hour intersection traffic volumes for the existing 30 study intersections were obtained from manual morning and evening peak period turning movement counts conducted in late August 2001 and May 2002. These intersections were designated for evaluation based on a “select-zone” analysis of the City’s Santa Ana River Crossing Cooperative Study (SARCCS) transportation model. These existing A.M. and P.M. peak hour turning movement volumes are illustrated in Figure 3.14-2 and Figure 3.14-3, respectively. The 2001/02 detailed weekday manual peak period traffic count data for the existing thirty of the 32 key study intersections, and the daily traffic counts for seven of the 24 key area roadway segments are provided in Appendix A of the Traffic Impact Analysis Report.

The existing average daily traffic (ADT) volumes on the key study roadway segments in the vicinity of the project site were obtained from recent (August 2001) traffic counts and the City’s Traffic Flow Map. These existing ADT volumes represent Existing 2001 conditions and are illustrated in Figure 3.14-4.



Not to Scale

SOURCE: Linscott Law & Greenspan 2003a

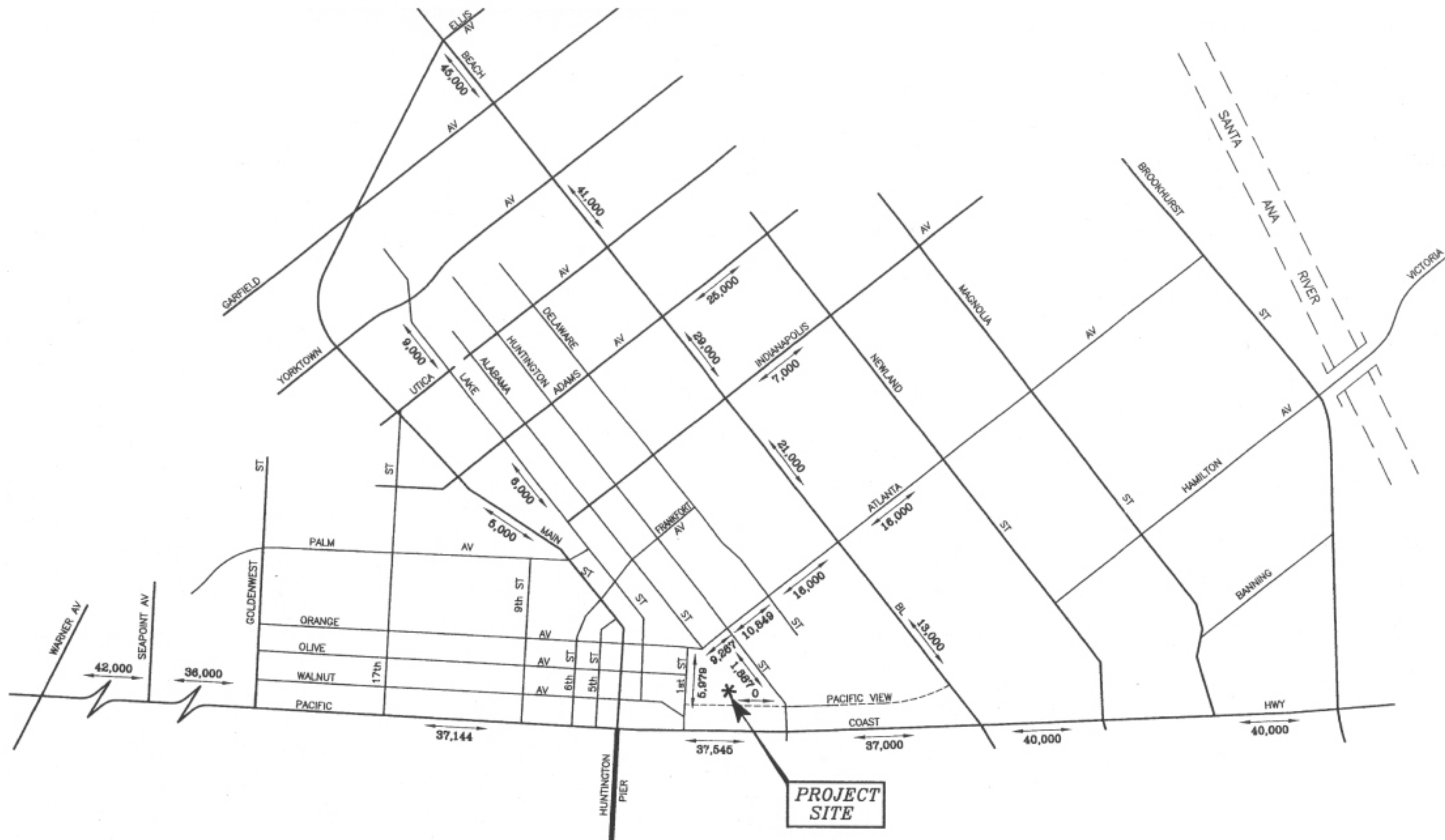


EIP
ASSOCIATES

10261-03

FIGURE 3.14-2
Existing AM Peak Hour Traffic Volumes

City of Huntington Beach • Pacific City EIR



Not to Scale

SOURCE: Linscott Law & Greenspan 2003a



10261-03

EIP
ASSOCIATES

FIGURE 3.14-4
Existing Average Daily Traffic Volumes

City of Huntington Beach • Pacific City EIR

A majority of the study intersections were counted in August 2001 during the peak summer season. At this time, average daily traffic counts along the four project frontage roadways as well as Atlanta Avenue east of the project site and PCH northwest of 9th Street were also taken. It should be noted that the summer weekday condition represents a “peak” period due to the beach resort character of the Downtown. Consequently, higher levels of traffic are experienced in the vicinity of the proposed project during the summer than during a typical weekday. Common traffic engineering practice is to mitigate traffic and parking impacts to a typical weekday period, rather than a peak day (such as a holiday weekend, or summer period). As a result, the summer weekday condition is included in Appendix H to provide a comparison between typical and summer periods. Direct traffic and parking project impacts and mitigation measures have been developed based on typical weekday traffic counts.

Existing Intersection Conditions

To quantify the existing baseline traffic conditions, the 30 existing study area intersections were analyzed to determine their operating conditions during the morning and evening peak periods.

Twenty six (26) of the study intersections are controlled by traffic signals. In conformance with City of Huntington Beach (City) criteria, the Intersection Capacity Utilization (ICU) Methodology was employed to investigate the existing A.M. and P.M. peak hour operating conditions for these key intersections. The ICU technique is used for signalized intersections and estimates the volume to capacity (V/C) relationship for an intersection based on individual V/C ratios for key conflicting movements. The ICU numerical value represents the percent of the capacity required by existing or future traffic.

The ICU value translates to a Level of Service (LOS) condition, which is a relative measure of the performance of the intersection. There are six Levels of Service that range from LOS A (free flow with an ICU of 0.60 or less) to LOS F (forced flow with an ICU in excess of 1.00). LOS D (ICU of 0.81 to 0.90) is traditionally considered the maximum acceptable LOS for urban and suburban peak hour conditions. The City of Huntington Beach considers LOS D to be the maximum acceptable LOS for signalized intersections. LOS definitions are provided in Table 3.14-1.

In conformance with the current State of California Department of Transportation (Caltrans) requirements, existing A.M. and P.M. peak hour operating conditions for the 19 Caltrans-operated signalized intersections within the project study area (SR-39 [Beach Boulevard] and SR-1 [PCH]) were evaluated using the 2000 Highway Capacity Manual (HCM) signalized methodology. Based on the HCM method of analysis, LOS for signalized intersections is defined in terms of control delay, which is a measure of driver discomfort, frustration, fuel consumption, and lost travel time.

Table 3.14-1 Level of Service Definitions for Signalized Intersections (ICU Method)

<i>Level of Service (LOS)</i>	<i>Intersection Capacity Utilization Value (V/C)</i>	<i>Level of Service Description</i>
A	0.00 to 0.60	Free flow; Very low delay, less than 10.0 seconds per vehicle.
B	0.61 to 0.70	Rural Design; Delay in the range of 10.1 to 20 seconds per vehicle.
C	0.71 to 0.80	Urban Design; Delay in the range of 20.1 to 35 seconds per vehicle.
D	0.81 to 0.90	Maximum Urban Design; Delay ranges from 35.1 to 55 seconds per vehicle.
E	0.91 to 1.00	Capacity; Delay ranges from 55.1 to 80 seconds per vehicle.
F	≥ 1.01	Forced Flow; Delay in excess of 80 seconds per vehicles

SOURCE: Linscott Law & Greenspan Engineers, *Traffic Impact Analysis Report*, April 2003a

The delay experienced by a motorist is made up of a number of factors that relate to control, geometries, traffic, and incidents. Whereas total delay is the difference between the travel time actually experienced and the reference travel time that would result during ideal conditions (in the absence of traffic control, geometric delay, roadway incidents, and other vehicles on the road), control delay represents the portion of the total delay that is attributed to the control facility. As such, control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Under the HCM methodology, LOS criteria for traffic signals are stated in terms of the average control delay per vehicle, which is measured in seconds/vehicle. The six qualitative categories of LOS that have been defined along with the corresponding HCM control delay value range for signalized intersections are shown in Table 3.14-2.

In addition, out of the 32 study intersections for the proposed project, four intersections (First Street/Atlanta Avenue; Huntington Street/Atlanta Avenue; Delaware Street/Atlanta Avenue; and Huntington Street/Pacific View Avenue) are currently unsignalized. In conformance with the City of Huntington Beach requirements, the existing A.M. and P.M. peak hour operating conditions for these four unsignalized intersections were also evaluated using the HCM methodology, which estimates the average total delay for each of the subject movements and determines the LOS for each movement. Table 3.14-3 defines the six qualitative categories of LOS for unsignalized intersections under the HCM method of analysis. Based on City criteria for unsignalized intersections, LOS D is the minimum acceptable intersection LOS.

Table 3.14-4 summarizes the existing service level calculations for the thirty existing study intersections (two of the 32 total study intersections are future intersections with no existing traffic) based on existing traffic volumes and current street geometry.

As shown, all thirty study intersections currently operate at LOS D or better, except the intersection of PCH at Warner Avenue, which currently operates at LOS E during the P.M. peak hour.

Table 3.14-2 Level of Service Criteria for Signalized Intersections (HCM Method)

<i>Level of Service (LOS)</i>	<i>Control Delay Per Vehicle (seconds/vehicle)</i>	<i>Level of Service Description</i>
A	≤10.0	This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.
B	>10.0 and ≤20.0	This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of average delay.
C	>20.0 and ≤35.0	Average traffic delays. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.
D	>35.0 and ≤55.0	Long traffic delays. At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	>55.0 and ≤80.0	Very long traffic delays. This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.
F	≥80.0	Severe congestion. This level, considered to be unacceptable to most drivers, often occurs with over saturation, that is, when arrival flow rates exceed the capacity of the intersection. It may also occur at high v/c ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors to such delay levels.

SOURCE: Highway Capacity Manual, 2000, Chapter 16 (Signalized Intersections).

Table 3.14-3 Level of Service Criteria for Unsignalized Intersections (HCM Method)

<i>Level of Service (LOS)</i>	<i>Highway Capacity Manual Delay Value (sec/veh)</i>	<i>Level of Service Description</i>
A	≤10.0	Little or no delay
B	>10.0 and ≤15.0	Short traffic delays
C	>15.0 and ≤25.0	Average traffic delays
D	>25.0 and ≤35.0	Long traffic delays
E	>35.0 and ≤50.0	Very long traffic delays
F	>50.0	Severe congestion

SOURCE: Highway Capacity Manual 2000

Table 3.14-4 Existing Year 2001/02 Peak Hour Levels of Service

<i>Key Intersection</i>	<i>Time Period</i>	<i>Control Type</i>	<i>ICU/HCM</i>	<i>LOS</i>
1 Goldenwest Street at Pacific Coast Highway	A.M.	6φ Traffic Signal	0.623	B
	P.M.		0.721	C
2 17th Street at Pacific Coast Highway	A.M.	3φ Traffic Signal	0.580	A
	P.M.		0.637	B
3 9th Street at Pacific Coast Highway	A.M.	3φ Traffic Signal	0.575	A
	P.M.		0.589	A

Table 3.14-4 Existing Year 2001/02 Peak Hour Levels of Service

<i>Key Intersection</i>	<i>Time Period</i>	<i>Control Type</i>	<i>ICU/HCM</i>	<i>LOS</i>
4 6th Street at Pacific Coast Highway	A.M.	5φ Traffic Signal	0.457	A
	P.M.		0.504	A
5 Main Street at 6th Street	A.M.	2φ Traffic Signal	0.206	A
	P.M.		0.321	A
6 Main Street at Pacific Coast Highway	A.M.	5φ Traffic Signal	0.611	B
	P.M.		0.697	B
7 First Street at Atlanta Avenue	A.M.	All-Way Stop	9.2 s/v	A
	P.M.		10.8 s/v	B
8 First Street at Pacific Coast Highway	A.M.	6φ Traffic Signal	0.452	A
	P.M.		0.444	A
9 Huntington Street at Atlanta Avenue	A.M.	All-Way Stop	10.7 s/v	B
	P.M.		18.6 s/v	C
10 Delaware Street at Atlanta Avenue	A.M.	Two-Way Stop	3.2 s/v	A
	P.M.		5.4 s/v	A
11 Huntington Street at Pacific Coast Highway	A.M.	5φ Traffic Signal	0.616	B
	P.M.		0.571	A
12 Huntington Street at Pacific View Avenue	A.M.	One-Way Stop	3.0 s/v	A
	P.M.		2.5 s/v	A
13 Beach Boulevard at Adams Avenue	A.M.	8φ Traffic Signal	0.580	A
	P.M.		0.665	B
14 Beach Boulevard at Indianapolis Avenue	A.M.	5φ Traffic Signal	0.317	A
	P.M.		0.426	A
15 Beach Boulevard at Atlanta Avenue	A.M.	5φ Traffic Signal	0.349	A
	P.M.		0.552	A
16 Beach Boulevard at Pacific Coast Highway	A.M.	8φ Traffic Signal	0.518	A
	P.M.		0.684	A
17 Newland Street at Atlanta Avenue	A.M.	8φ Traffic Signal	0.329	A
	P.M.		0.464	A
18 Newland Street at Pacific Coast Highway	A.M.	6φ Traffic Signal	0.567	A
	P.M.		0.596	A
19 Magnolia Street at Pacific Coast Highway	A.M.	6φ Traffic Signal	0.565	A
	P.M.		0.626	B
20 Magnolia Street at Atlanta Avenue	A.M.	8φ Traffic Signal	0.371	A
	P.M.		0.514	A
21 Pacific Coast Highway at Seapoint Avenue	A.M.	3φ Traffic Signal	0.661	B
	P.M.		0.803	C
22 Pacific Coast Highway at Warner Avenue	A.M.	8φ Traffic Signal	0.886	D
	P.M.		0.928	E
23 Pacific Coast Highway at Brookhurst Street	A.M.	8φ Traffic Signal	0.683	B
	P.M.		0.729	C
24 Main Street at Adams Avenue	A.M.	5φ Traffic Signal	0.445	A
	P.M.		0.618	B
25 Main Street at Utica Avenue	A.M.	8φ Traffic Signal	0.210	A
	P.M.		0.308	A

Table 3.14-4 Existing Year 2001/02 Peak Hour Levels of Service

<i>Key Intersection</i>	<i>Time Period</i>	<i>Control Type</i>	<i>ICU/HCM</i>	<i>LOS</i>
26 Lake Street at Adams Avenue	A.M.	5 ϕ Traffic Signal	0.512	A
	P.M.		0.588	A
27 Lake Street at Yorktown Avenue	A.M.	2 ϕ Traffic Signal	0.328	A
	P.M.		0.451	A
28 Beach Boulevard at Yorktown Avenue	A.M.	8 ϕ Traffic Signal	0.632	B
	P.M.		0.690	B
29 Beach Boulevard at Garfield Avenue	A.M.	8 ϕ Traffic Signal	0.624	B
	P.M.		0.749	C
30 Beach Boulevard at Ellis Avenue/ Main Street	A.M.	6 ϕ Traffic Signal	0.557	A
	P.M.		0.669	B
31 First Street at Pacific View Avenue (future)	A.M.	N/A	N/A	N/A
	P.M.	N/A	N/A	N/A
32 Beach Boulevard at Pacific View Avenue (future)	A.M.	N/A	N/A	N/A
	P.M.	N/A	N/A	N/A

s/v = seconds per vehicle (delay)

Bold V/C and LOS values indicate adverse service levels based on City LOS Standards

SOURCE: Linscott, Law & Greenspan 2003a

Existing Roadway Segments (Links)

In conformance with the City's criteria, existing daily operating conditions for the 24 existing roadway links have been investigated according to the volume-to-capacity (V/C) of each link. The V/C relationship is used to estimate the LOS of the roadway segment with the volume based on 24-hour traffic count data and the capacity based in the City's classification of each roadway. Based on the City's General Plan, Orange County's MPAH, Caltrans Route Concept Report, and consultation with City staff, the roadway segment capacities of each street classification are shown in Table 3.14-5.

The results of the analysis of existing service levels for the 24 existing study roadway segments, based on existing 24-hour traffic volumes and current roadway geometry, are summarized in Table 3.14-6.

As shown, only two of the study segments currently operate below the City's maximum V/C criteria of 0.81. Based on the V/C method of analysis, the roadway segments of PCH between Goldenwest Street/Sixth Street and Huntington Street /Beach Boulevard currently operate at LOS E on a daily basis. The remaining 22 roadway segments in the study area currently operate at LOS C or better.

Table 3.14-5 Roadway Segment Capacities

<i>Street Classification</i>	<i>Number of Lanes</i>	<i>LOS A Design Volume (Vehicles per day)</i>	<i>LOS B Design Volume (Vehicles per day)</i>	<i>LOS C Design Volume (Vehicles per day)</i>	<i>LOS D Design Volume (Vehicles per day)</i>	<i>LOS E Design Volume (Vehicles per day)</i>
Smartstreet/Principal	8 (divided)	45,300	52,500	60,000	67,400	75,100
Expressway	4 (divided)	36,500	42,600	48,700	54,900	60,800
Expressway	6 (divided)	54,600	63,700	72,800	82,000	91,000
Major Arterial	6 (divided)	33,900	39,400	45,000	50,600	56,300
Primary Arterial	4 (divided)	22,500	26,300	30,000	33,800	37,500
Secondary Arterial	4 (undivided)	15,000	17,500	20,000	22,500	25,000
Arterial Collector	2 (divided)	10,800	12,600	14,400	16,200	18,000
Collector	2 (undivided)	7,500	8,800	10,000	11,300	12,500

SOURCE: Linscott Law & Greenspan Engineers, April 2003a

Table 3.14-6 Year 2001 Existing Roadway Link Capacity Analysis Summary

<i>Arterial</i>	<i>LOS E Capacity</i>	<i>Lanes</i>	<i>Existing</i>		<i>LOS</i>
			<i>Daily Volume</i>	<i>V/C Ratio</i>	
Pacific Coast Highway Warner Ave to Seapoint Ave	60,800	4	42,000	0.691	B
Pacific Coast Highway Seapoint Ave to Goldenwest St	60,800	4	36,000	0.592	A
Pacific Coast Highway Goldenwest Street to 6th Street	37,500	4	37,144	0.991	E
Pacific Coast Highway 6th Street to First Street	56,300	6	37,500	0.666	B
Pacific Coast Highway First Street to Huntington Street	56,300	6	37,545	0.667	B
Pacific Coast Highway Huntington Street to Beach Blvd	37,500	4	37,000	0.987	E
Pacific Coast Highway Beach Blvd to Newland Street	56,300	6	40,000	0.710	C
Pacific Coast Highway Magnolia St to Brookhurst St	56,300	6	40,000	0.710	C
Beach Boulevard PCH to Atlanta Ave	75,100	6	13,000	0.173	A
Beach Boulevard Atlanta Ave to Indianapolis Ave	75,100	6	21,000	0.280	A
Beach Boulevard Indianapolis Ave to Adams Ave	75,100	6	29,000	0.386	A
Beach Boulevard Adams Ave to Yorktown Ave	75,100	6	41,000	0.546	A
Beach Boulevard Garfield Ave to Main St	75,100	6	45,000	0.599	A

Table 3.14-6 Year 2001 Existing Roadway Link Capacity Analysis Summary

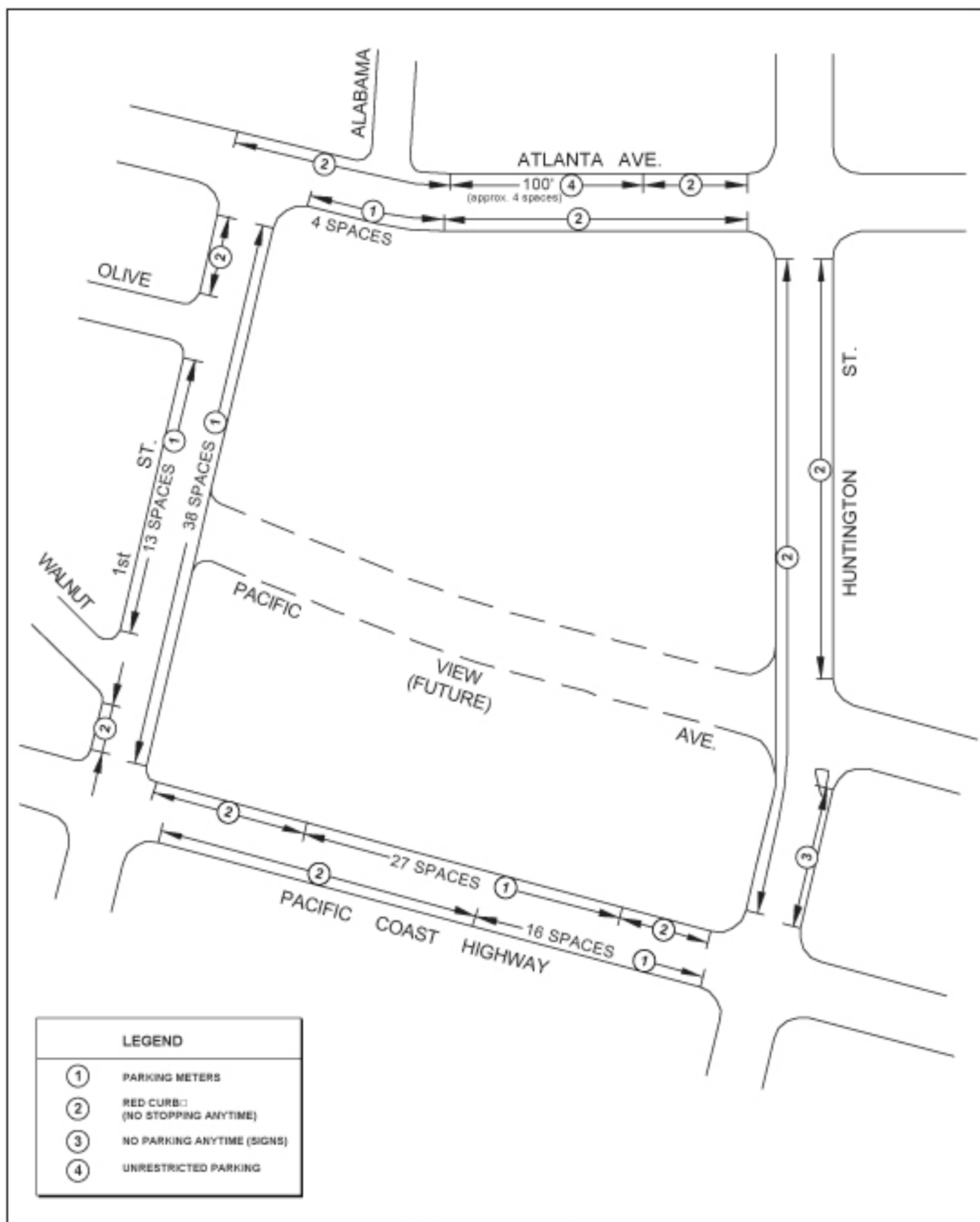
<i>Existing</i>					
Atlanta Avenue Beach Blvd to Delaware St	32,000	4	16,000	0.500	A
Atlanta Avenue 1st St to Huntington St	12,500	2	9,267	0.741	C
Atlanta Avenue Huntington St to Delaware St	18,000	2	10,849	0.603	A
First Street Orange Ave to Pacific Coast Highway	12,500	2	5,979	0.478	A
Huntington Street Atlanta Ave to Pacific View Ave	18,000	2	1,887	0.105	A
Main Street Palm Ave to Adams Ave	12,500	2	5,000	0.400	A
Lake Street Indianapolis Ave to Adams Ave	18,000	2	6,000	0.333	A
Lake Street Adams Ave to Yorktown Ave	18,000	2	9,000	0.500	C
Adams Avenue Beach Blvd to Newland St	37,500	4	25,000	0.667	B
Indianapolis Avenue Beach Blvd to Newland St	25,000	4	7,000	0.280	A
Atlanta Avenue Beach Blvd to Newland St	25,000		16,000	.640	B
Pacific View (future with project) First Street to Huntington Street	—	—	—	—	—
Bold V/C and LOS values indicate adverse service levels based on City LOS Standards					

SOURCE: Linscott, Law & Greenspan 2003a

Existing Parking

The existing off-site parking plan for the adjacent roadways surrounding the project site is shown in Figure 3.14-5.

There are currently 102 parking spaces (98 metered spaces and 100 feet of unrestricted parking, or approximately 4 spaces) on both sides of First Street, Atlanta Avenue, and PCH adjacent to the project site, 69 of which abut the project site.



Not to Scale

SOURCE: Linscott Law & Greenspan 2003a



10261-00

EIP

ASSOCIATES

FIGURE 3.14-5
Existing Off-Site Parking Plan

City of Huntington Beach • Pacific City EIR

3.14.2 Regulatory Framework

Regional

Southern California Association of Governments

SCAG's Regional Comprehensive Plan and Guide (RCPG) and RHNA are tools for coordinating regional planning and development strategies in southern California. Policies contained in the RCPG identified by SCAG as relevant to the proposed project are identified in Table 3.14-7, and this table also includes an assessment of the proposed project's consistency with these policies.

Table 3.14-7 SCAG Regional Comprehensive Plan and Guide—Policies Applicable to Transportation/Traffic

<i>Policy</i>	<i>Project Consistency</i>
4.01. Transportation investments shall be based on SCAG's adopted Regional Performance Indicators.	The City considers SCAG Regional Performance Indicators when making transportation investments.
4.02. Transportation investments shall mitigate environmental impacts to an acceptable level.	MM TR-1 through MM TR-3 would mitigate impacts to the extent feasible.
4.03. Transportation Control Measures shall be a priority.	The project proposes MM TR-3, which requires traffic signal installation.
4.16. Maintaining and operating the existing transportation system will be a priority over expanding capacity.	The City considers maintenance of the existing system prior to expansion when making improvements.

Orange County Congestion Management Plan

The Congestion Management Plan (CMP) requires that a traffic impact analysis be conducted for any project generating 2,400 or more daily trips, or 1,600 or more daily trips for projects that directly access the CMP Highway System (HS). Per the CMP guidelines, this number is based on the desire to analyze any impacts that will be 3 percent or more of the existing CMP highway system facilities' capacity. The CMPHS includes specific roadways, which include State Highways and Super Streets, which are now known as Smart Streets, and CMP arterial monitoring locations/intersections. Therefore, the CMP traffic impact analysis (TIA) requirements relate to the potential impacts only on the specified CMPHS. The CMP highway system arterial facilities and CMP arterials closest to the proposed project site consists of Beach Boulevard, PCH, and Warner Avenue. The CMP arterial monitoring locations/intersections nearest to the project site include Warner Avenue at PCH, Beach Boulevard at PCH, and Beach Boulevard at Adams Avenue.

Local

General Plan Circulation Element

The General Plan Circulation Element for City of Huntington Beach was reviewed for goals and policies that would be applicable to the proposed project. Table 3.14-8 identifies goals and objectives presented in the Circulation Element of the General Plan related to traffic that are potentially relevant to the proposed project. This section also includes an assessment of the proposed project's consistency with the policies adopted in support of these goals and objectives.

Table 3.14-8 General Plan Circulation Element—Policies Applicable to Transportation/Traffic

Goal, Objective, or Policy	Project Consistency
Goal CE 2. Provide a circulation system which supports existing, approved and planned land uses throughout the City while maintaining a desired level of service on all streets and at all intersections.	Conformance with implementing policies, as discussed below, results in conformance with this goal.
Objective CE 2.1. Comply with City's performance standards for acceptable levels of service.	Conformance with implementing policies, as discussed below, results in conformance with this objective.
Policy CE 2.1.1. Maintain a city-wide level of service (LOS) not to exceed LOS "D" for intersections during the peak hours.	The proposed project would worsen LOS at intersections projected to operate below LOS D, although the project itself would not result in the decline of intersection LOS below D.
Policy CE 2.1.1. Maintain a citywide level of service (LOS) for links not to exceed LOS "C" for daily traffic with the exception of Pacific Coast Highway south of Brookhurst Street.	The proposed project would worsen LOS at roadways projected to operate below LOS C, although the project itself would not result in the decline of roadway LOS below C.
Objective CE 2.2. Decrease nonresidential traffic on local residential-serving streets.	Conformance with implementing policies, as discussed below, results in conformance with this objective.
Policy CE 2.2.2. Discourage the creation of new major roadway connections which would adversely impact the residential character of existing residential neighborhoods.	No major new roadway connections are proposed. The project would extend Pacific View Avenue through the site, consistent with the Precise Plan of Street Alignment.
Objective CE 2.3. Ensure that the location, intensity and timing of new development is consistent with the provision of adequate transportation infrastructure and standards as defined in the Land Use Element.	Conformance with implementing policies, as discussed below, results in conformance with this objective.
Policy CE 2.3.1. Require development projects to mitigate off-site traffic impacts and pedestrian, bicycle, and vehicular conflicts to the maximum extent feasible.	The project proposes roadway improvements to mitigate traffic impacts to the maximum extent feasible.

Table 3.14-8 General Plan Circulation Element—Policies Applicable to Transportation/Traffic

<i>Goal, Objective, or Policy</i>	<i>Project Consistency</i>
Policy CE 2.3.2. Limit driveway access points and require adequate driveway widths onto arterial roadways and require driveways be located to ensure the smooth and efficient flow of vehicles, bicycles and pedestrians.	Driveway access points would be provided sufficient to serve the project. Impact TR-8 demonstrates that driveways would ensure a smooth and efficient flow of traffic.
Policy CE 2.3.3. Require, where appropriate, an irrevocable offer of mutual access across adjacent nonresidential properties fronting arterial roadways and require use of shared driveway access.	Mutual access and shared driveways to proposed commercial uses and hotel uses would be provided on site.
Policy CE 2.3.4. Require that new development mitigate its impact on City streets, including but not limited to, pedestrian, bicycle, and vehicular conflicts, to maintain adequate levels of service.	The project proposes roadway improvements to mitigate traffic impacts to the maximum extent feasible.
Goal CE 4. Encourage and develop a transportation demand management (TDM) system to assist in mitigation traffic impacts and in maintaining a desired level of service on the circulation system.	Conformance with implementing policies, as discussed below, results in conformance with this goal.
Objective CE 4.1. Pursue transportation management strategies that can maximize vehicle occupancy, minimize average trip length, and reduce the number of vehicle trips.	Conformance with implementing policies, as discussed below, results in conformance with this objective.
Policy CE 4.1.1. Encourage nonresidential development to provide employee incentives for utilizing alternatives to the conventional automobile (i.e., carpools, vanpools, buses, bicycles and walking).	A detailed employee incentive plan has not been developed, although the project is envisioned to include employee incentives for alternative transportation. A bus turnout would be provided as part of the project site.
Policy CE 4.1.6. Encourage that proposals for major new nonresidential developments include submission of a TDM plan to the City.	A TDM plan would be prepared for commercial uses
Goal CE 5. Provide sufficient, well designed and convenient on and off street parking facilities throughout the City.	Conformance with implementing policies, as discussed below, results in conformance with this goal.
Policy CE 5.1.1. Maintain an adequate supply of parking that supports the present level of demand and allow for the expected increase in private transportation use.	Adequate parking to serve project demand would be provided on site, as discussed under impact TR-7
Policy CE 5.1.2. Provide safe and convenient parking that has minimal impacts on the natural environment, the community image, or quality of life.	Parking would be provided on-site and would be in subterranean structures to minimize impacts.

Table 3.14-8 General Plan Circulation Element—Policies Applicable to Transportation/Traffic

<i>Goal, Objective, or Policy</i>	<i>Project Consistency</i>
Goal CE 6. Provide a city-wide system of efficient and attractive pedestrian, equestrian, and waterway facilities for commuter, school and recreational use.	Conformance with implementing policies, as discussed below, results in conformance with this goal.
Objective CE 6.1. Promote the safety of bicyclists and pedestrians by adhering to Caltrans and City-wide standards.	Conformance with implementing policies, as discussed below, results in conformance with this objective.
Policy CE 6.1.2. Link bicycle routes as shown in Figure CE-9 with pedestrian trails and bus routes to promote an interconnected system.	Pedestrian circulation on-site would connect to the existing Class II bike path on First Street.
Policy CE 6.1.6. Maintain existing pedestrian facilities and require new development to provide pedestrian walkways and bicycle routes between developments, schools, and public facilities.	<p>The project would provide a network of pedestrian walkways that would link to citywide routes and would allow movement between developments, schools, and public facilities. Specifically, at-grade pedestrian crossings are proposed at the existing signalized intersections of PCH at Huntington Street and PCH at First Street to the beach. In addition, although not part of the proposed project, a grade-separated pedestrian bridge would be located midway between Huntington Street and First Street to connect the project site to the beach.</p> <p>To address the potential impacts on pedestrians and bicyclists within the project site associated with the provision of diagonal parking, the proposed project would comply with Municipal Code sections 10.40.200–210 by obtaining a resolution to establish a diagonal parking zone and an exception to allow for diagonal parking on Pacific View Avenue, which is a master plan arterial street.</p>
Policy CE 6.1.7. Require new development to provide accessible facilities for the elderly and disabled.	Facilities accessible to the elderly and disabled would be provided, consistent with code requirements.
Goal CE 7. Maintain and enhance the visual quality and scenic views along designated corridors.	Conformance with implementing policies, as discussed below, results in conformance with this goal.
Objective CE 7.1. Enhance existing view corridors along scenic corridors and identify opportunities for the designation of new view corridors.	Conformance with implementing policies, as discussed below, results in conformance with this objective.
Policy CE 7.1.1. Require the roadways, as shown in Figure CE-12, to be improved and maintained as local scenic highways, major urban scenic highways, minor urban scenic highways, and landscape corridors with key entry points.	As discussed under Impact AES-1 impacts to the view corridor along Pacific Coast Highway would be less than significant. The project would maintain local highways by providing landscaping along PCH and at key entry points.
Policy CE 7.1.5. Require any bridges, culverts, drainage ditches, retaining walls and other ancillary roadway elements to be compatible and architecturally consistent with surrounding development and any other design guidelines.	As discussed under Impact AES-2 impacts to the visual character would be less than significant. The retaining walls, and pedestrian bridge that could be constructed in the future and other project features would be architecturally consistent with surrounding development.

General Plan Growth Management Element

The policies listed within the Growth Management Element and applicable to transportation are consistent with the Circulation Element in its objective to ensure adequate infrastructure for existing and planned land uses while providing for orderly growth in the City. Table 3.14-9 identifies goals and objectives presented in the Growth Management Element of the General Plan related to transportation that are potentially relevant to the proposed project. This table also includes an assessment of the proposed project's consistency with the policies adopted in support of these goals and objectives.

Table 3.14-9 General Plan Growth Management Element—Policies Applicable to Transportation/Traffic

<i>Goal, Objective, or Policy</i>	<i>Project Consistency</i>
Goal GM 3. Provide a circulation system that meets the service demands of planned development and minimizes congestion.	Conformance with implementing policies, as discussed below, results in conformance with this goal.
Objective GM 3.1. Establish minimum standards for traffic circulation and provide a means to ensure that those standards are met and maintained.	Conformance with implementing policies, as discussed below, results in conformance with this policy.
Policy GM 3.1.2. Maintain a citywide level of service (LOS) for links not exceed LOS "C" for daily traffic with the exception of Pacific Coast Highway, south of Brookhurst Street.	The proposed project would worsen LOS at roadways projected to operate below LOS C, although the project itself would not result in the decline of roadway LOS below C.
Policy GM 3.1.3. Maintain a citywide level of service (LOS) not to exceed LOS "D" for intersections during the peak hours.	The proposed project would worsen LOS at intersections projected to operate below LOS D, although the project itself would not result in the decline of intersection LOS below D.
Policy GM 3.1.8. Promote traffic reduction strategies including alternate travel modes, alternate work hours, and a decrease in the number of vehicle trips throughout the city.	A detailed employee incentive plan has not been developed, although the project is envisioned to include employee incentives for alternative transportation and would comply with the City's Transportation Demand Management Ordinance. A bus turnout would be provided as part of the project site.

3.14.3 Thresholds of Significance

Project impacts would be considered significant if any of the following would occur:

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (e.g., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways
 - › The City of Huntington Beach *Traffic Impact Assessment Preparation Guidelines* specify the LOS standards and impact criteria to be used to determine whether an intersection or roadway

segment would be significantly impacted. The following performance criteria for significance have been established for the City:

- *For intersections:* a project-related V/C ratio value greater than or equal to LOS E (0.905), which requires mitigation by reducing the V/C ratio to LOS D (0.904) or baseline, if the baseline is LOS E or F (greater than or equal to 0.905). Baseline is defined as the pre-project condition (Year 2008 Background).
- *For roadway segments:* a project-related V/C ratio value greater than or equal to D (0.805), a project-related increase of 0.030, and an adverse intersection service level (LOS E or F) at either of the two adjacent intersections, which requires mitigation by reducing the V/C ratio to LOS C (0.804) or baseline, if the baseline is LOS D, E, or F (greater than or equal to 0.805). Baseline is defined as the pre-project condition (Year 2008 Background).⁹
- › The LOS standards and impact criteria specified by Caltrans for State-controlled intersections are defined as follows:
 - *For Caltrans intersections:* a project-related V/C ratio value greater than or equal to LOS E (55.1 sec/veh), which requires mitigation by reducing the intersection delay to LOS D (55.0sec/veh) or baseline, if the baseline is LOS E or F (greater than or equal to 55.1 sec/veh). Baseline is defined as the pre-project condition (Year 2008 Background).
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses
- Result in inadequate emergency access
- Result in inadequate parking capacity
- Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)

3.14.4 Project Impacts

Future Traffic Conditions—Without and With the Proposed Project

Project Traffic Generation

Based on the generation factors and equations found in the Sixth Edition of *Trip Generation*, published by the Institute of Transportation Engineers (ITE) [Washington D.C., 1997], the traffic generation of the proposed project has been forecasted. The daily A.M. and P.M. peak hour traffic volumes for a “typical” weekday for the proposed project are shown in Table 3.14-10.

⁹ Absent any specific impact criteria for roadway segments in the Caltrans *Traffic Impact Studies Preparation Guide* [June 2001], the City’s impact criteria was applied to the study segments on Pacific Coast Highway and Beach Boulevard.

Table 3.14-10 Project Traffic Generation Forecast

ITE Land Use Code	ADT	A.M. Peak Hour			P.M. Peak Hour		
		In	Out	Total	In	Out	Total
310: Hotel (400 Rooms)	3,212	140	88	228	128	116	244
Internal Capture (10%/5%/15%)	-321	-7	-4	-11	-19	-17	-36
Mode Shift (20%/10%/25%)	-642	-14	-9	-23	-32	-29	-61
<i>Subtotal</i>	2,249	119	75	194	77	70	147
710: General Office (60,000 SF)	896	109	15	124	25	122	147
Internal Capture (15%/10%/10%)	-134	-11	-1	-12	-3	-12	-15
Mode Shift (10%/5%/5%)	-90	-5	-1	-6	-1	-6	-7
<i>Subtotal</i>	672	93	13	106	21	104	125
820: Retail/Restaurant (175,000 SF)	9,769	137	88	225	436	473	909
Internal Capture (8%/12%/8%)	-782	-16	-11	-27	-35	-38	-73
Mode Shift (20%/10%/25%)	-1,954	-14	-9	-23	-109	-118	-227
<i>Subtotal</i>	7,033	107	68	175	292	317	609
Museum (5,000 SF)	Nom.	Nom.	Nom.	Nom.	Nom.	Nom.	Nom.
230: Residential							
Condominium/Townhouse (516 du)	2,626	31	155	186	160	77	237
Internal Capture (12%/8%/13%)	-315	-2	-12	-14	-21	-10	-31
Mode Shift (10%/10%/15%)	-263	-3	-16	-19	-24	-12	-36
<i>Subtotal</i>	2,048	26	127	153	115	55	170
Net Traffic Generation Forecast	12,002	345	283	628	505	546	1,051

Internal Capture and Mode Shift values are based on the Trip Reduction Flow Diagram contained in Appendix C
(X%/Y%/Z%) = Daily/A.M. Peak/P.M. Peak

SOURCE: Linscott, Law & Greenspan 2003a

An internal trip reduction and mode-shift reduction was applied to the traffic generation forecast in Table 3.14-10 to account for the trip interaction between the hotel, restaurant, commercial/retail, office, existing/proposed residential, and beach/recreational uses. The trip interaction between the proposed uses within the project site (internal capture) and the trip interaction between the proposed project uses and the beach and Downtown areas (mode-shift) are presented in the Trip Reduction Flow Diagram in Appendix C of the Traffic Analysis Impact Report for the proposed project (Appendix H of this EIR). As shown in Table 3.14-10, the proposed project, after factoring in the internal trip reduction and mode-shift reduction, would have a trip generation potential of 12,002 daily trips, of which 628 trips (345 inbound, 283 outbound) are produced in the A.M. peak hour and 1,051 trips (505 inbound, 546 outbound) are generated in the P.M. peak hour.

Project Traffic Distribution and Assignment

The geographic distribution of traffic generated by a development is dependent upon several factors such as the distribution of population and employment, other shopping opportunities, accessibility to the site, and existing traffic patterns. The traffic distribution pattern for the proposed project was based primarily on a

“select-zone” analysis of the City’s transportation model and was adjusted slightly based on knowledge of the area and impact of existing land use and traffic control in the study area.

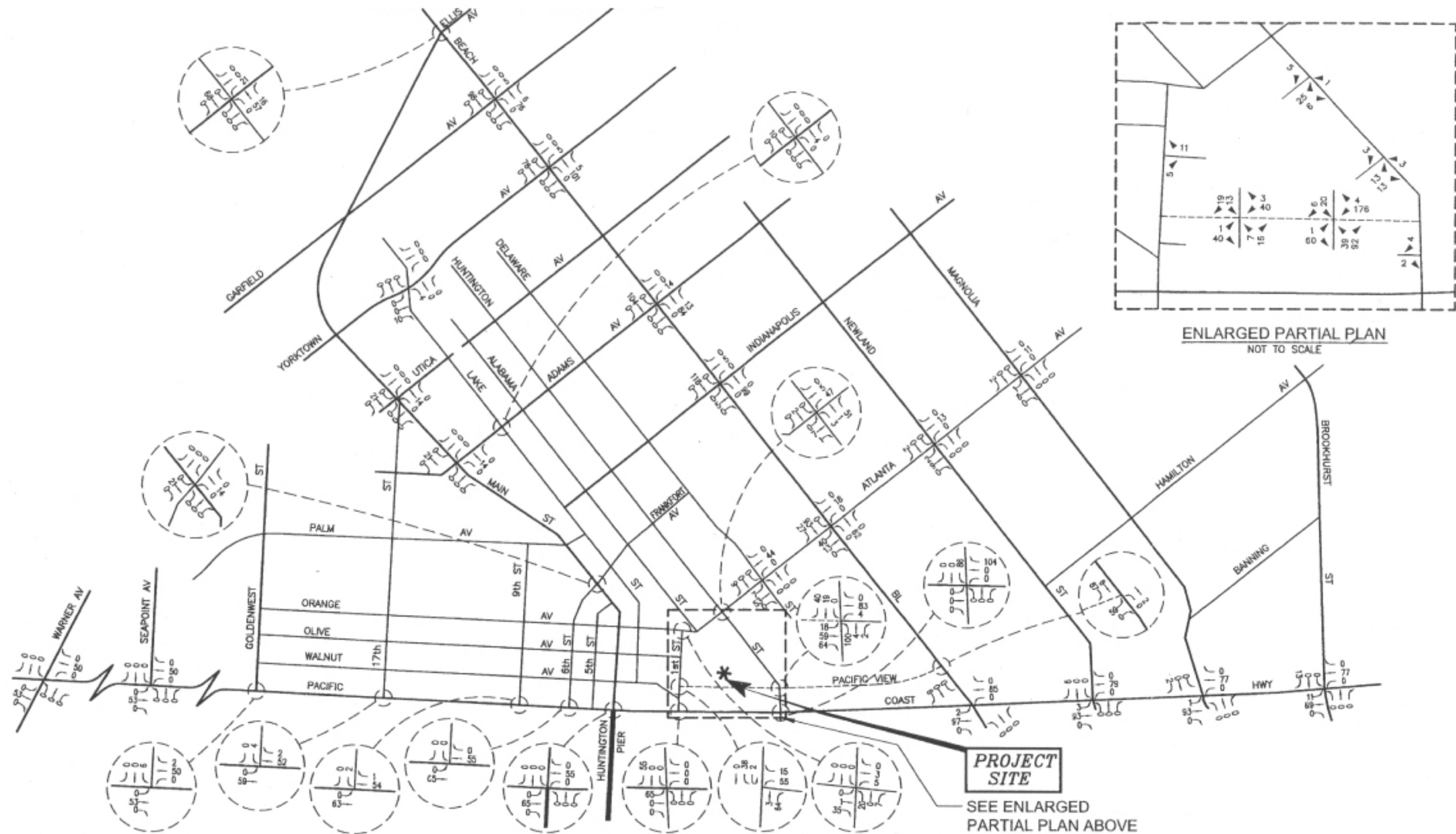
Based on the traffic model, the anticipated traffic distribution and assignment pattern for the Retail/Restaurant/Office, Residential, and Hotel portions of the proposed project was identified. For the Retail/Restaurant/Office portion, it was determined that a significant percentage of the project-related traffic would be expected to use Beach Boulevard (26 percent), PCH (35 percent), and Atlanta Avenue (19 percent). A significant percentage of the Residential project-related traffic would be expected to use Beach Boulevard (35 percent), PCH (45 percent), and Atlanta Avenue (32 percent). An additional five percent is expected to use Main Street. As for the Hotel component, a significant percentage of the anticipated traffic distribution and assignment pattern for the project-related traffic is expected to use Beach Boulevard (45 percent), PCH (50 percent), and Atlanta Avenue (5 percent). The anticipated weekday A.M. and P.M. peak hour proposed project traffic volumes associated with the proposed project are presented in Figure 3.14-6 and Figure 3.14-7, respectively.

Figure 3.14-8 presents the added daily project traffic assignments on the key roadway links in the study area. As shown, Pacific View Avenue is anticipated to carry the greatest amount of project traffic at 7,041 vehicles per day (VPD).

Planned Traffic Improvements

There are several committed traffic improvements to roadways serving the project site that are included as part of the proposed project, and these improvements were included in the traffic impact analysis performed for both Year 2008 and Year 2020. These improvements include the following:

- Atlanta Avenue—The south side of Atlanta Avenue would be widened approximately 30 to 35 feet along the project frontage between First Street and Huntington Street. This would allow for an additional eastbound travel lane and a raised median island. The widening would also include a 30-foot property line dedication (60 feet on south side of centerline and approximately 30 feet on the north side [30 feet existing]). The exact dedication would vary depending on the location due to the centerline location and the curve in the roadway.
- First Street—The east side of First Street would be widened approximately 18 feet along the project frontage between PCH and Atlanta Avenue. This would allow for an additional northbound and southbound travel lane and a raised median island as well as an additional southbound left turn lane at PCH. The widening would also include property line dedication to result in a 100-foot right-of-way



Not to Scale

SOURCE: Linscott Law & Greenspan 2003a

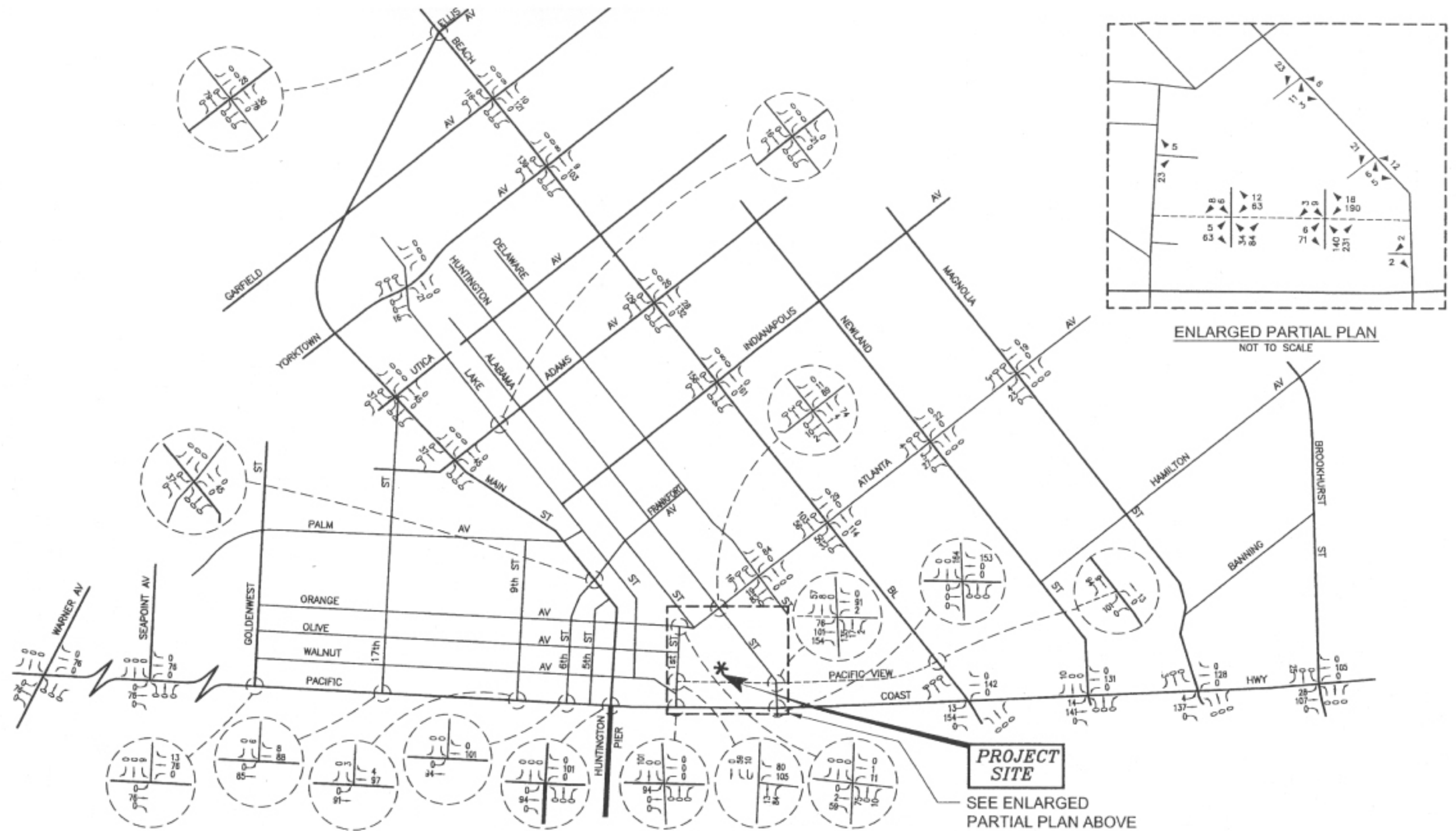


EIP
ASSOCIATES

10261-00

FIGURE 3.14-6
AM Peak Hour Project Traffic Volumes

City of Huntington Beach • Pacific City EIR



Not to Scale

SOURCE: Linscott Law & Greenspan 2003a

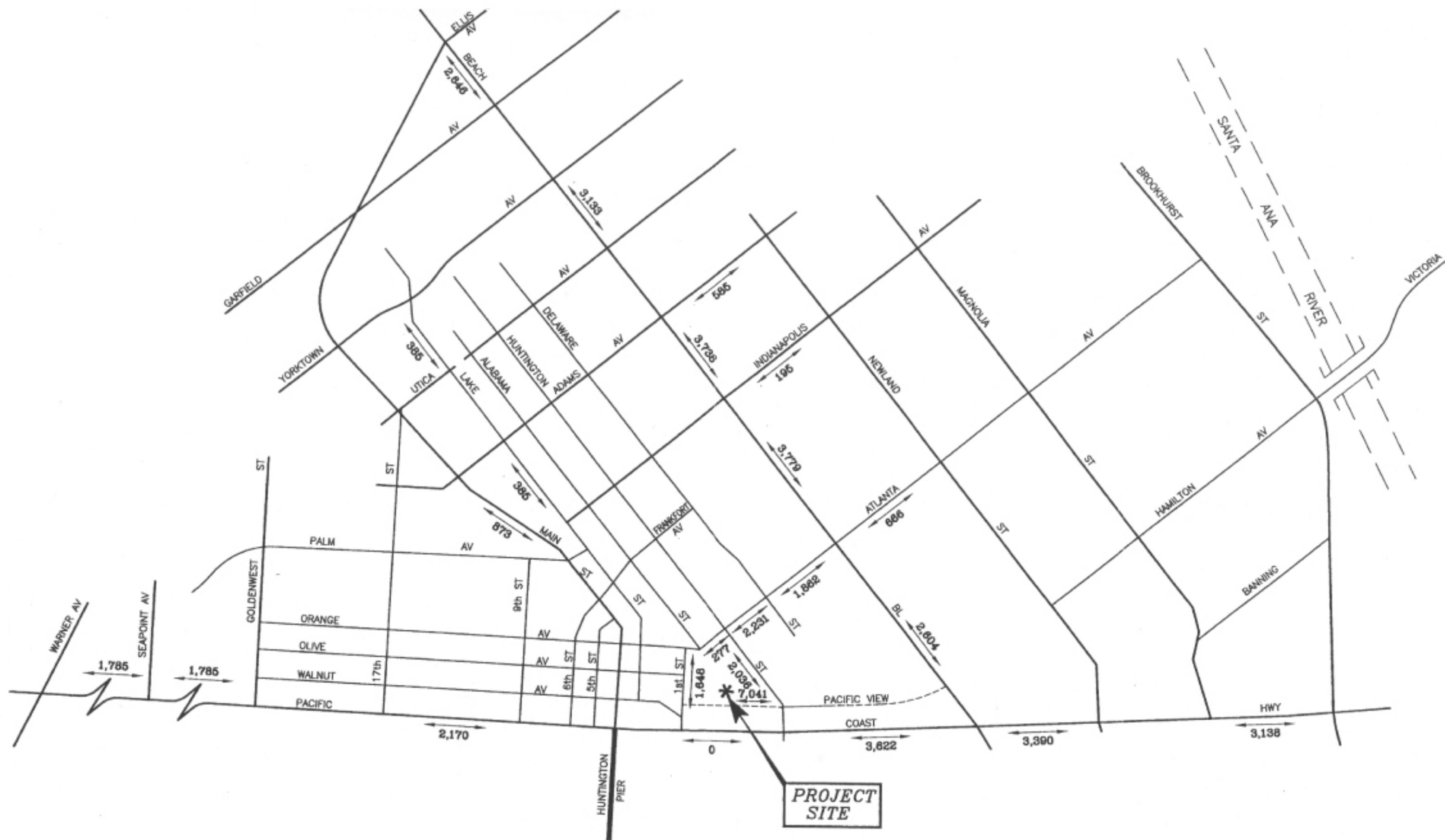


EIP
ASSOCIATES

10261-03

FIGURE 3.14-7
PM Peak Hour Project Traffic Volumes

City of Huntington Beach • Pacific City EIR



Not to Scale

SOURCE: Linscott Law & Greenspan 2003a



10261-03

EIP
ASSOCIATES

FIGURE 3.14-8
Average Daily Project Traffic Volumes
City of Huntington Beach • Pacific City EIR

- Pacific Coast Highway—The north side of PCH would be widened approximately 8 feet along the project frontage between First Street and Huntington Street. The widening would also include a 10-foot property line dedication and installation of an OCTA bus turnout along the north side of PCH west of Huntington Street. The widening would allow for a third westbound through lane to be established on PCH west of Huntington Street, and would provide the ability for the incorporation of a bicycle lane through this section.
- Huntington Street—The west side of Huntington Street would be widened approximately 10 feet along the project frontage between PCH and Pacific View Avenue. This would allow for an additional southbound travel lane as well as an exclusive southbound right turn lane at PCH. The widening would also include a 10-foot property line dedication (40-foot half-width).
- Pacific View Avenue—Pacific View Avenue would be developed as part of the Pacific City project through the project site from Huntington Street to First Street consistent with the Precise Plan of Street Alignment. However, based on the Year 2008 total daily traffic volume as presented in Exhibit 27 and Exhibit 28 (8,848 VPD), it is recommended that Pacific View Avenue be constructed to a width of 70 feet curb-to-curb. This would allow for one 20-foot westbound through lane, a 14-foot raised landscaped median island, and a 14-foot eastbound through lane and angle parking at 45° (22 feet). The roadway would be dedicated to a width of 90 feet, which would allow for an 18-foot parkway on the north side and a 2-foot parkway on the south side. The ultimate configuration of this roadway would include a 4 lane divided cross section within the 90 foot right-of-way. It is anticipated that some on-street parking may be retained with the reconfiguration, though angled parking will not be allowed under this configuration. Appendix K of the traffic report presents a diagram of the proposed layout of Pacific View Avenue.
- Pedestrian Pathway—In addition to the widening along Atlanta Avenue, a twenty-four-foot wide pedestrian access easement would be dedicated through the project site extending from the south side of Atlanta Avenue, at Alabama Street, to Pacific View Avenue at the easterly residential access driveway where pedestrians can cross at the all-way stop. Linkages are also proposed from the residential village through the visitor-serving commercial component of the project site. From the visitor-serving commercial area, access is provided to PCH and the beach via at-grade intersections at PCH at First Street and PCH at Huntington Street. Furthermore, as part of the overall Master Plan, a grade-separated pedestrian bridge would also be located midway between Huntington Street and First Street to provide a connection from the beach to the public areas near the hospitality uses located within the visitor-serving commercial area.

Future Year 2008 Conditions

The proposed project has an assumed completion date of Year 2008. In order to properly evaluate the potential impact of the proposed project on the local streets, it is necessary to develop estimates of the near-term (Year 2008) traffic conditions at the 32 key intersections, which include two future intersections along Pacific View Avenue, and 25 key roadway segments, with and without project-related traffic.

Year 2008 Background Traffic Conditions

Ambient Traffic

The background traffic growth estimates for Year 2008 were calculated using ambient growth factors, which are intended to include unknown and future cumulative projects in the study area, as well as account for regular growth in traffic volumes due to development of projects outside the study area. Based on buildout traffic volumes and prior studies conducted in the Downtown area, future growth in the traffic volumes at the key study intersections were calculated at 1 percent per year. Upon the application of this growth rate to existing 2001 traffic volumes, it was determined that a 7 percent growth in existing volumes at the 32 key study intersections and 24 key roadway segments would occur by horizon year 2008.

Cumulative Projects Traffic Characteristics

Based on information provided by the City of Huntington Beach Planning staff, there are fourteen potential planned and/or approved projects, which may generate traffic in the project study area by the Year 2008. Of the fourteen potential cumulative projects, four have been identified as having significant traffic generation potential. These four projects are

- The Strand at 5th Street and PCH
- The Waterfront Residential development and Hyatt Regency Resort
- The Beachside project at Atlanta Avenue and Beach Boulevard
- The Boardwalk project at Goldenwest Street and Palm Avenue

The corresponding forecast peak hour and daily traffic volumes for each of the four cumulative projects in the City of Huntington Beach are shown in Table 3.14-11.

As shown, the total forecast related traffic generation is estimated at 19,882 two-way daily trips with 1,303 A.M. peak hour trips (545 inbound, 758 outbound) and 1,781 P.M. peak hour trips (1,037 inbound, 744 outbound).

Table 3.14-11 Related Projects Traffic Generation Forecast

Related Project Description	Daily 2-Way	A.M. Peak Hour			P.M. Peak Hour			
		In	Out	Total	In	Out	Total	
Trip Generation Forecast								
The Strand								
Retail/Restaurant/Office/Hotel (121,000 SF & 149 Rooms)	7,106	220	163	383	324	293	617	
Waterfront Ocean Grand Resort								
Low Density Residential (184 DU)	2,208	40	118	158	129	77	206	
Resort Hotel (519 Rooms)	<u>4,515</u>	<u>208</u>	<u>140</u>	<u>348</u>	<u>213</u>	<u>182</u>	<u>395</u>	
Subtotal	6,723	248	258	506	342	259	601	
The Beachside								
Single-Family Residential (86 DU)	823	16	48	64	56	31	87	
The Boardwalk (Area 4B & PLC)								
Residential (500 DU)	<u>5,230</u>	<u>61</u>	<u>289</u>	<u>350</u>	<u>315</u>	<u>161</u>	<u>476</u>	
Total Related Project Trip Generation	19,882	545	758	1,303	1,037	744	1,781	

SOURCE: City of Huntington Beach Planning Department 2003; LSA Associates 1998, 1999, 2002

Intersection Analysis—City Criteria

Future Year 2008 Without Proposed Project

Based on the traffic generation forecast for the Year 2008 background traffic conditions, the peak hour ICU/HCM Level of Service results at the 32 study intersections were determined. The results are shown in Table 3.14-12, column (1).

An analysis of near-term (Year 2008) traffic conditions in Table 3.14-12 indicates that the forecast increase in background traffic would continue to cause one of the 32 study intersections to operate at adverse service levels. The intersection of PCH at Warner Avenue, which currently operates at LOS E during the P.M. peak hour, is expected to operate at LOS F (P.M.) with the addition of background traffic in Year 2008. The remaining 31 key intersections are expected to continue to operate at LOS D or better in both peak hours.

Future Year 2008 With Proposed Project

As shown in Table 3.14-12, column (2), the intersection of PCH at Warner Avenue would experience an increase in ICU as a result of the proposed project traffic combined with background traffic (ambient plus cumulative projects), but the intersection would continue to operate at the same adverse service levels (LOS E or F) during the A.M. and P.M. peak hours. The remaining 31 key study intersections have been forecasted to continue to operate at acceptable service levels with the addition of the proposed project traffic during both the weekday A.M. and P.M. peak commute hours. These projected A.M. and P.M. peak hour traffic volumes for the Year 2008 are illustrated in Figures 3.14-9 and 3.14-10, respectively.

Table 3.14-12 Year 2008 Peak Hour Intersection Levels of Service Summary

Key Intersections	Time Period	(1) Year 2008 Background Conditions		(2) Year 2008 Background Plus Project		(3) Project Impact/ Significance		(4) Year 2008 With Mitigation	
		ICU	LOS	ICU	LOS	ICU Inc.	Y/N	ICU	LOS
1. Goldenwest Street at Pacific Coast Highway	A.M.	0.696	B	0.713	C	0.017	N	—	—
	P.M.	0.813	D	0.837	D	0.024	N	—	—
2. 17th Street at Pacific Coast Highway	A.M.	0.647	B	0.666	B	0.019	N	—	—
	P.M.	0.725	C	0.755	C	0.030	N	—	—
3. 9th Street at Pacific Coast Highway	A.M.	0.647	B	0.667	B	0.02	N	—	—
	P.M.	0.667	B	0.697	B	0.03	N	—	—
4. 6th Street at Pacific Coast Highway	A.M.	0.540	A	0.553	A	0.013	N	—	—
	P.M.	0.674	B	0.694	B	0.020	N	—	—
5. Main Street at 6th Street	A.M.	0.257	A	0.269	A	0.012	N	—	—
	P.M.	0.384	A	0.410	A	0.026	N	—	—
6. Main Street at Pacific Coast Highway	A.M.	0.669	B	0.681	B	0.012	N	—	—
	P.M.	0.770	C	0.790	C	0.020	N	—	—
7. First Street at Atlanta Avenue	A.M.	0.284	A	0.300	A	0.016	N	—	—
	P.M.	0.315	A	0.367	A	0.052	N	—	—
8. First Street at Pacific Coast Highway	A.M.	0.502	A	0.501	A	-0.001	N	—	—
	P.M.	0.535	A	0.589	A	0.054	N	—	—
9. Huntington Street at ¹ Atlanta Avenue	A.M.	11.72	B	0.355	A	N/A	N	—	—
	P.M.	28.00	D	0.516	A	N/A	N	—	—
10. Delaware Street at ¹ Atlanta Avenue	A.M.	3.34	A	3.44	A	0.100	N	—	—
	P.M.	6.48	A	10.44	B	3.960	N	—	—
11. Huntington Street at Pacific Coast Highway	A.M.	0.701	B	0.717	C	0.016	N	—	—
	P.M.	0.691	B	0.740	C	0.049	N	—	—
12. Huntington Street at ¹ Pacific View Avenue	A.M.	4.76	A	8.89	A	4.130	N	—	—
	P.M.	4.62	A	13.38	B	8.760	N	—	—
13. Beach Boulevard at Adams Avenue	A.M.	0.651	B	0.678	B	0.027	N	—	—
	P.M.	0.736	C	0.765	C	0.029	N	—	—
14. Beach Boulevard at Indianapolis Avenue	A.M.	0.358	A	0.380	A	0.022	N	—	—
	P.M.	0.479	A	0.515	A	0.036	N	—	—
15. Beach Boulevard at Atlanta Avenue	A.M.	0.412	A	0.436	A	0.024	N	—	—
	P.M.	0.622	B	0.681	B	0.059	N	—	—
16. Beach Boulevard at Pacific Coast Highway	A.M.	0.576	A	0.595	A	0.019	N	—	—
	P.M.	0.794	C	0.839	D	0.045	N	—	—
17. Newland Street at Atlanta Avenue	A.M.	0.360	A	0.362	A	0.002	N	—	—
	P.M.	0.515	A	0.526	A	0.011	N	—	—
18. Newland Street at Pacific Coast Highway	A.M.	0.619	B	0.637	B	0.018	N	—	—
	P.M.	0.673	B	0.707	C	0.034	N	—	—
19. Magnolia Street at Pacific Coast Highway	A.M.	0.617	B	0.635	B	0.018	N	—	—
	P.M.	0.694	B	0.721	C	0.027	N	—	—
20. Magnolia Street at Atlanta Avenue	A.M.	0.399	A	0.402	A	0.003	N	—	—
	P.M.	0.563	A	0.571	A	0.008	N	—	—
21. Pacific Coast Highway at Seapoint Avenue	A.M.	0.730	C	0.745	C	0.015	N	—	—
	P.M.	0.875	D	0.898	D	0.023	N	—	—
22. Pacific Coast Highway at Warner Avenue	A.M.	0.966	E	0.981	E	0.015	Y	0.793	C
	P.M.	1.021	F	1.043	F	0.022	Y	0.842	D

Table 3.14-12 Year 2008 Peak Hour Intersection Levels of Service Summary

Key Intersections	Time Period	(1) Year 2008 Background Conditions		(2) Year 2008 Background Plus Project		(3) Project Impact/Significance		(4) Year 2008 With Mitigation	
		ICU	LOS	ICU	LOS	ICU Inc.	Y/N	ICU	LOS
23. Pacific Coast Highway at Brookhurst Street	A.M.	0.743	C	0.757	C	0.014	N	—	—
	P.M.	0.809	D	0.845	D	0.036	N	—	—
24. Main Street at Adams Avenue	A.M.	0.500	A	0.509	A	0.009	N	—	—
	P.M.	0.703	B	0.729	C	0.026	N	—	—
25. Main Street at Utica Avenue	A.M.	0.227	A	0.231	A	0.004	N	—	—
	P.M.	0.336	A	0.346	A	0.010	N	—	—
26. Lake Street at Adams Avenue	A.M.	0.553	A	0.556	A	0.003	N	—	—
	P.M.	0.644	B	0.656	B	0.012	N	—	—
27. Lake Street at Yorktown Avenue	A.M.	0.366	A	0.373	A	0.007	N	—	—
	P.M.	0.494	A	0.509	A	0.015	N	—	—
28. Beach Boulevard at Yorktown Avenue	A.M.	0.705	C	0.721	C	0.016	N	—	—
	P.M.	0.773	C	0.800	C	0.027	N	—	—
29. Beach Boulevard at Garfield Avenue	A.M.	0.685	B	0.707	C	0.022	N	—	—
	P.M.	0.830	D	0.858	D	0.028	N	—	—
30. Beach Boulevard at Ellis Avenue/ Main Street	A.M.	0.610	B	0.621	B	0.011	N	—	—
	P.M.	0.736	C	0.752	C	0.016	N	—	—
31. First Street at Pacific View ¹ Avenue (future)	A.M.	N/A	N/A	2.62	A	N/A	N	—	—
	P.M.	N/A	N/A	4.34	A	N/A	N	—	—
32. Beach Boulevard at Pacific View Ave (future)	A.M.	0.215	A	0.250	A	0.035	N	—	—
	P.M.	0.252	A	0.284	A	0.032	N	—	—

1. LOS indicated as intersection delay in seconds/vehicle (s/v)

Bold V/C and LOS values indicate adverse service levels based on City LOS Standards

SOURCE: Linscott, Law & Greenspan 2003a

In addition, the projected ADT volumes, which represent the Year 2008 conditions with the proposed project, are illustrated in Figure 3.14-11.

Intersection Analysis—State of California (Caltrans) Methodology

As required by the State of California Department of Transportation (Caltrans), the 19 state route intersections within the project study area [SR-39 (Beach Boulevard) and SR-1 (PCH)] were analyzed on an A.M. and P.M. peak hour basis, for existing and Year 2008 traffic conditions, consistent with the recently published Caltrans *Guide for the Preparation of Traffic Impact Studies*, [June, 2001].

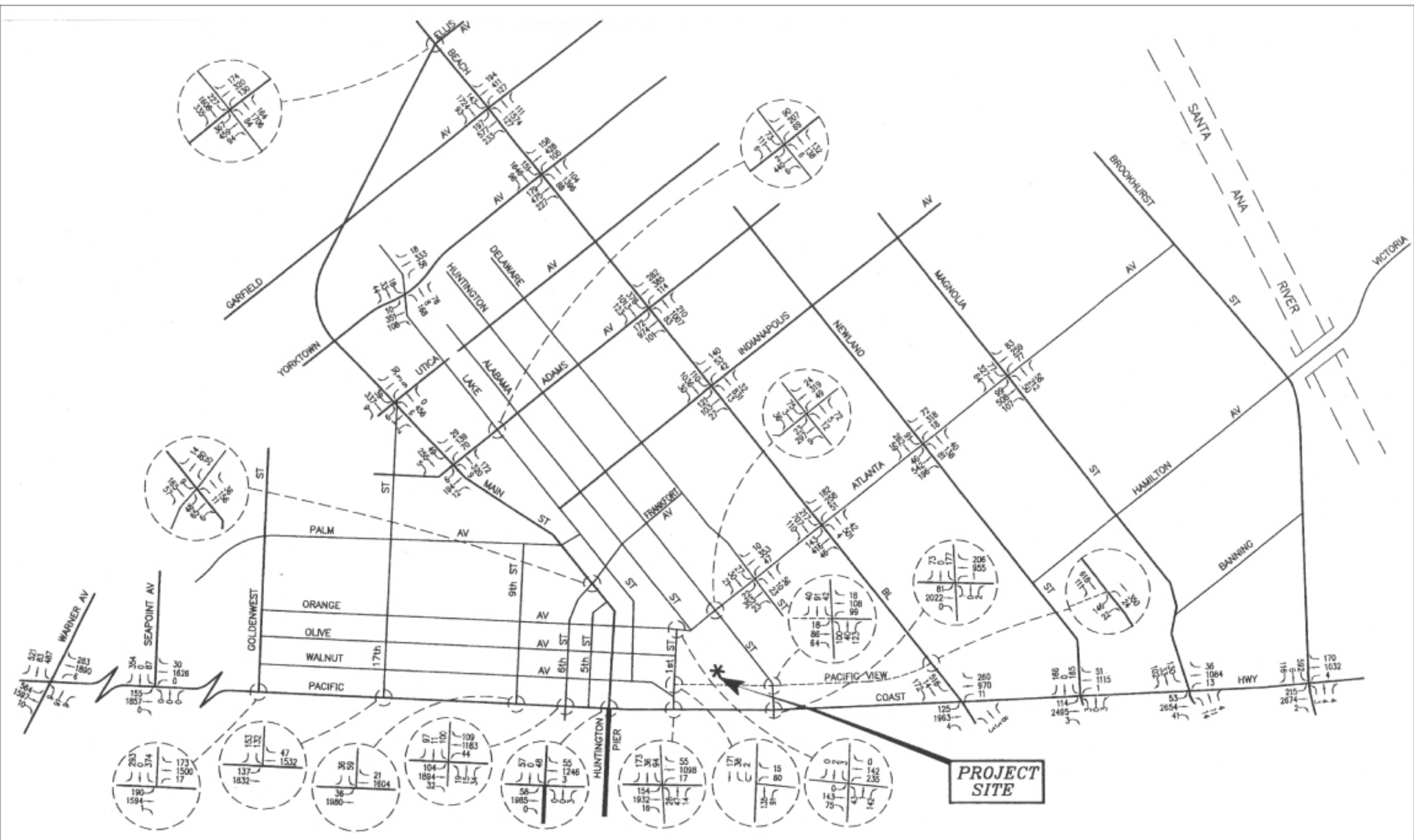
The peak hour HCM (HCS-2000 for signalized intersections) Level of Service results at the 19 State-controlled study intersections within the study area are shown in Table 3.14-13.

Table 3.14-13 Peak Hour Intersection Levels of Service Summary—Caltrans (HCM)

Key Intersections	Time Period	(1) Year 2001 Existing Conditions		(2) Year 2008 Background Conditions		(3) Year 2008 Background Plus Project		(4) Project Impact/ Significance	(5) Year 2008 With Mitigation	
		HCM	LOS	HCM	LOS	HCM	LOS	Yes/No	HCM	LOS
1. Goldenwest Street at Pacific Coast Highway	A.M.	38.0	D	51.5	D	54.9	D	No	—	—
	P.M.	35.0	C	45.9	D	51.4	D	No	—	—
2. 17th Street at Pacific Coast Highway	A.M.	19.5	B	21.9	C	22.7	C	No	—	—
	P.M.	18.7	B	24.0	C	30.2	C	No	—	—
3. 9th Street at Pacific Coast Highway	A.M.	18.5	B	21.6	C	22.8	C	No	—	—
	P.M.	15.6	B	22.0	C	32.1	C	No	—	—
4. 6th Street at Pacific Coast Highway	A.M.	21.5	C	23.5	C	23.8	C	No	—	—
	P.M.	18.3	B	21.6	C	21.9	C	No	—	—
5. Main Street at Pacific Coast Highway	A.M.	21.3	C	22.1	C	22.6	C	No	—	—
	P.M.	22.0	C	23.8	C	24.5	C	No	—	—
6. First Street at Pacific Coast Highway	A.M.	33.5	C	40.1	D	47.8	D	No	—	—
	P.M.	35.4	D	43.6	D	51.1	D	No	—	—
7. Huntington Street at Pacific Coast Highway	A.M.	21.4	C	28.9	C	47.7	D	No	—	—
	P.M.	18.8	B	23.1	C	41.4	D	No	—	—
8. Beach Boulevard at Adams Avenue	A.M.	39.1	D	40.9	D	41.4	D	No	—	—
	P.M.	41.5	D	45.4	D	48.5	D	No	—	—
9. Beach Boulevard at Indianapolis Avenue	A.M.	26.4	C	26.8	C	27.1	C	No	—	—
	P.M.	27.1	C	27.9	C	28.6	C	No	—	—
10. Beach Boulevard at Atlanta Avenue	A.M.	29.3	C	29.6	C	29.6	C	No	—	—
	P.M.	32.5	C	33.4	C	34.7	C	No	—	—
11. Beach Boulevard at Pacific Coast Highway	A.M.	35.0	C	39.7	D	42.3	D	No	—	—
	P.M.	25.5	C	33.7	C	46.1	D	No	—	—
12. Newland Street at Pacific Coast Highway	A.M.	23.7	C	26.3	C	27.7	C	No	—	—
	P.M.	23.1	C	25.9	C	28.1	C	No	—	—
13. Magnolia Street at Pacific Coast Highway	A.M.	23.9	C	27.0	C	29.1	C	No	—	—
	P.M.	25.2	C	29.0	C	32.5	C	No	—	—
14. Pacific Coast Highway at Seapoint Avenue	A.M.	24.9	C	29.3	C	31.5	C	No	29.0	C
	P.M.	34.6	C	62.8	E	79.4	E	Yes	51.5	D
15. Pacific Coast Highway at Warner Avenue	A.M.	60.7	E	105.2	F	117.3	F	Yes	44.9	D
	P.M.	204.9	F	293.0	F	319.8	F	Yes	42.6	D
16. Pacific Coast Highway at Brookhurst Street	A.M.	32.9	C	37.9	D	40.6	D	No	—	—
	P.M.	26.5	C	33.6	C	45.4	D	No	—	—
17. Beach Boulevard at Yorktown Avenue	A.M.	39.8	D	44.0	D	45.9	D	No	—	—
	P.M.	39.0	D	46.1	D	52.2	D	No	—	—
18. Beach Boulevard at Garfield Avenue	A.M.	38.8	D	41.4	D	43.1	D	No	—	—
	P.M.	42.4	D	49.4	D	54.6	D	No	—	—
19. Beach Boulevard at Ellis Ave/Main Street	A.M.	36.6	D	38.5	D	39.4	D	No	—	—
	P.M.	42.5	D	49.0	D	54.0	D	No	—	—

Bold V/C and LOS values indicate adverse service levels based on City LOS Standards

SOURCE: Linscott, Law & Greenspan 2003a



Not to Scale

SOURCE: Linscott Law & Greenspan 2003a

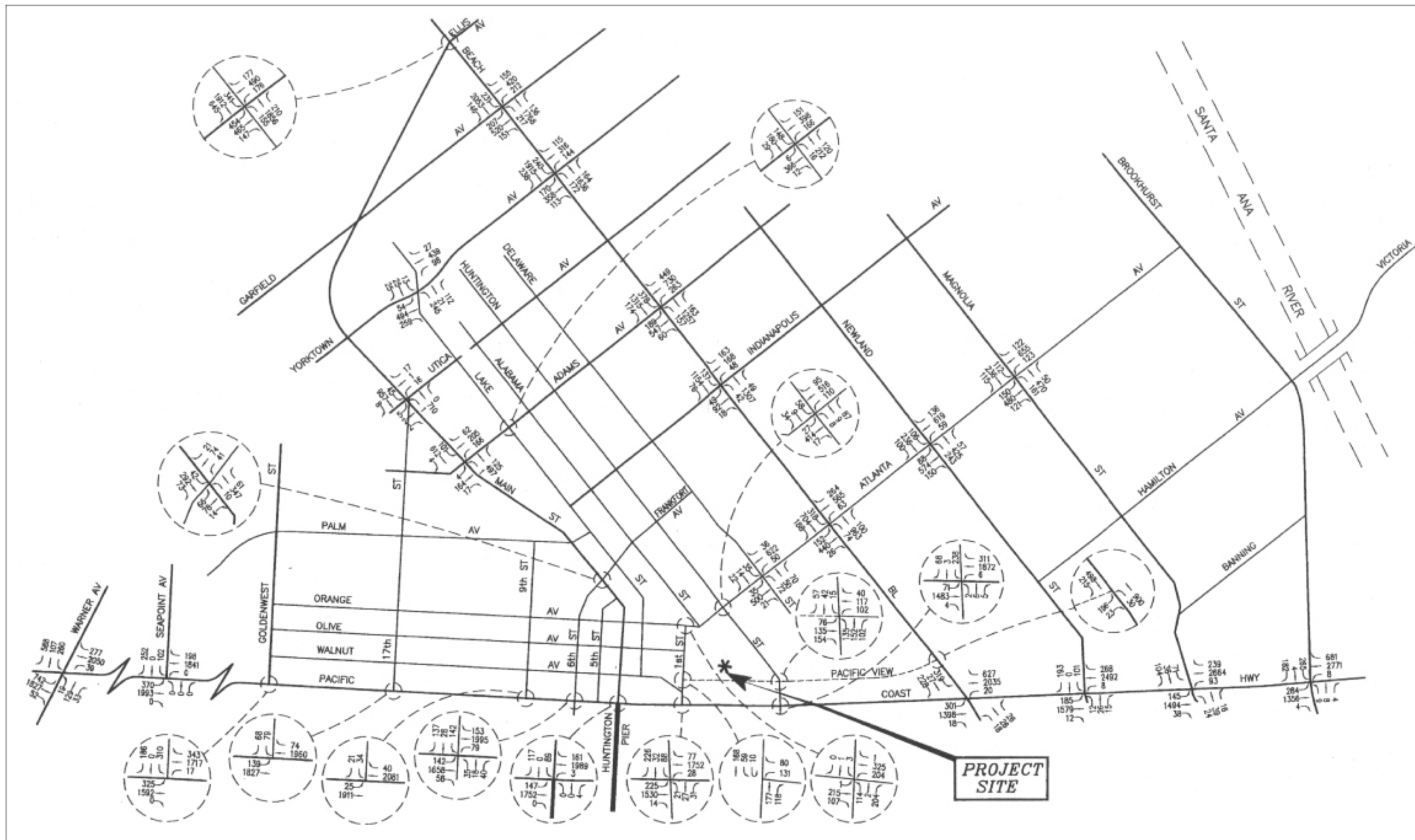


EIP
ASSOCIATES

10261-03

FIGURE 3.14-9
2008 AM Peak Hour Volumes with Project Traffic

City of Huntington Beach • Pacific City EIR



Not to Scale

SOURCE: Linscott Law & Greenspan 2003a



10261-00

EIP
ASSOCIATES

FIGURE 3.14-10
2008 PM Peak Hour Volumes with Project Traffic

City of Huntington Beach • Pacific City EIR

Future Year 2008 Without Proposed Project

As shown in Table 3.14-13, the forecast increase in background traffic is expected to result in or continue to operate at adverse service levels at two of the 19 State-controlled study intersections. The intersection of PCH at Warner Avenue, which currently operates at LOS E during the A.M. peak hour and LOS F during the P.M. peak hour, is expected to operate at LOS F during both A.M. and P.M. peak hours in Year 2008, with the addition of background traffic. The intersection of PCH at Seapoint Avenue, which currently operates at LOS C during both A.M. and P.M. peak hours, is expected to operate at LOS E during the P.M. peak hour in Year 2008, with the addition of background traffic. The remaining 17 State study intersections are expected to continue to operate at LOS D or better in both peak hours.

Future Year 2008 With Proposed Project

When the proposed project-related traffic is combined with the background traffic (ambient plus cumulative projects), the same two key study intersections (PCH at Warner and Seapoint Avenues) would experience an increase in HCM, but are expected to continue to operate at the same adverse service levels. The intersection of PCH at Warner Avenue would still operate at LOS F during both A.M. and P.M. peak hours, while the intersection of PCH at Seapoint Avenue would operate at LOS E during the P.M. peak hour. The remaining 17 intersections are expected to either operate at LOS D or better during the A.M. and P.M. peak hours, with the addition of project traffic.

Roadway Segment Analysis

The daily roadway segment Level of Service at the 25 study roadway segments are summarized in Table 3.14-14.

Table 3.14-14 Year 2008 Roadway Link Capacity Analysis Summary									
<i>Arterial</i>	(1) <i>LOS E Capacity</i>	(2) <i>Lanes</i>	(3) <i>Year 2008 Background</i>			(4) <i>Year 2008 with Project</i>			(5) <i>V/C Increase</i>
			<i>Daily Volume</i>	<i>V/C Ratio</i>	<i>LOS</i>	<i>Daily Volume</i>	<i>V/C Ratio</i>	<i>LOS</i>	
Pacific Coast Highway Warner Ave to Seapoint Ave	60,800	4	46,456	0.764	C	48,241	0.793	C	0.029
Pacific Coast Highway Seapoint Ave to Goldenwest St	60,800	4	39,794	0.655	B	41,579	0.684	B	0.029
Pacific Coast Highway Goldenwest Street to 6th Street	37,500	4	42,711	1.139	F	44,881	1.197	F	0.058
Pacific Coast Highway 6th Street to First Street	56,300	6	43,067	0.765	C	45,237	0.803	C	0.038
Pacific Coast Highway First Street to Huntington Street	56,300	6	43,810	0.778	C	43,810	0.778	C	0.000

Table 3.14-14 Year 2008 Roadway Link Capacity Analysis Summary

Arterial	(1)	(2)	(3)		LOS	(4)			(5)
	LOS E Capacity	Lanes	Year 2008 Background			Year 2008 with Project			V/C Increase
			Daily Volume	V/C Ratio		Daily Volume	V/C Ratio	LOS	
Pacific Coast Highway Huntington Street to Beach Blvd	37,500	4	43,496	1.160	F	47,118	1.256	F	0.096
Pacific Coast Highway Beach Blvd to Newland Street	56,300	6	46,612	0.828	D	50,002	0.888	D	0.060
Pacific Coast Highway Magnolia St to Brookhurst St	56,300	6	46,477	0.826	D	49,615	0.881	D	0.055
Beach Boulevard PCH to Atlanta Ave	56,300	6	17,636	0.313	A	20,240	0.360	A	0.047
Beach Boulevard Atlanta Ave to Indianapolis Ave	56,300	6	25,629	0.455	A	29,408	0.522	A	0.067
Beach Boulevard Indianapolis Ave to Adams Ave	56,300	6	33,962	0.603	A	37,700	0.670	B	0.067
Beach Boulevard Adams Ave to Yorktown Ave	56,300	6	46,249	0.821	D	49,382	0.877	D	0.056
Beach Boulevard Garfield Ave to Main St	56,300	6	50,962	0.905	E	53,608	0.952	E	0.047
Atlanta Avenue Beach Blvd to Delaware St	25,000	4	17,583	0.703	A	19,445	0.778	B	0.075
Atlanta Avenue 1st St to Huntington St	25,000	4	10,312	0.825	D	10,589	0.424	A	-0.401
Atlanta Avenue Huntington St to Delaware St	18,000	2	12,004	0.667	B	14,235	0.791	C	0.124
First Street Atlanta Ave to Olive Ave	37,500	4	6,753	0.180	A	8,401	0.224	A	0.044
Huntington Street Atlanta Ave to Pacific View Ave	18,000	2	2,019	0.112	A	4,055	0.225	A	0.113
Main Street Palm Ave to Adams Ave	12,500	2	6,629	0.530	A	7,502	0.600	A	0.070
Lake Street Indianapolis Ave to Adams Ave	18,000	2	6,420	0.357	A	6,805	0.378	A	0.021
Lake Street Adams Ave to Yorktown Ave	18,000	2	9,630	0.535	A	10,015	0.556	A	0.021
Adams Avenue Beach Blvd to Newland St	37,500	4	27,566	0.735	C	28,151	0.751	C	0.016
Indianapolis Avenue Beach Blvd to Newland St	25,000	2	7,788	0.312	A	7,983	0.319	A	0.007
Atlanta Avenue Beach Blvd to Newland St	25,000	4	18,173	0.727	A	18,839	0.754	A	0.027
Pacific View First Street to Huntington Street	18,000	2	538	0.030	A	7,579	0.421	A	0.391

Bold V/C and LOS values indicate adverse service levels based on City and/or CMP LOS standards.

The roadway capacities in column (2) represent the capacities with project-specific improvements; however, Year 2008 Background LOS are based on existing capacities.

SOURCE: Linscott, Law & Greenspan 2003a

Future Year 2008 Without Proposed Project

An analysis of future (Year 2008) background traffic conditions in Table 3.14-14 indicates that seven of the 25 study roadway segments are expected to operate at adverse service levels:

- PCH: Goldenwest Street to 6th Street (LOS F, V/C = 1.139)
- PCH: Huntington Street to Beach Boulevard (LOS F, V/C = 1.160)
- PCH: Beach Boulevard to Newland Street (LOS D, V/C = 0.828)
- PCH: Magnolia Street to Brookhurst Street (LOS D, V/C = 0.826)
- Beach Boulevard: Adams Avenue to Yorktown Avenue (LOS D, V/C = 0.821)
- Beach Boulevard: Garfield Avenue to main Street Ellis Avenue (LOS E, V/C = 0.905)
- Atlanta Avenue: Huntington Street to First Street (LOS D, V/C = 0.825)

The remaining 18 study roadway segments are expected to operate at LOS C or better on a daily basis without the proposed project.

Future Year 2008 With Proposed Project

When the proposed project-related traffic is combined with the background traffic (ambient plus cumulative projects), 6 of the 7 study roadway segments identified above (with the Atlanta Avenue segment as the exception) would experience an increase in V/C, but would continue to operate at the same adverse service levels:

- PCH: Goldenwest Street to 6th Street (LOS F, V/C = 1.197)
- PCH: Huntington Street to Beach Boulevard (LOS F, V/C = 1.256)
- PCH: Beach Boulevard to Newland Street (LOS D, V/C = 0.888)
- PCH: Magnolia Street to Brookhurst Street (LOS D, V/C = 0.881)
- Beach Boulevard: Adams Avenue to Yorktown Avenue (LOS D, V/C = 0.877)
- Beach Boulevard: Garfield Avenue to main Street Ellis Avenue (LOS E, V/C = 0.952)

As shown in Table 3.14-14, the Atlanta Avenue segment would improve to LOS A with the proposed project traffic. This is due to project-specific improvements that would add additional lanes along the Atlanta Avenue project frontage. Each of the 5 adversely affected study roadway segments would also experience a V/C increase greater than 0.030. However, based on the City's impact criteria for roadway segments, none of the study roadway segments would have an adjacent study intersection(s) with adverse

levels of service with the addition of project traffic. The remaining 18 roadway segments are expected to operate at LOS C or better on a daily basis, with the addition of project traffic.

Future Year 2020 General Plan Buildout Conditions

The Year 2020 General Plan Build-out condition without and with the proposed project traffic was analyzed at 30 key study intersections and 27 key roadway segments as part of the traffic study. These intersections and roadway segments were based on traffic forecasts using the Santa Ana River Crossings Cooperative Study (SARCCS) traffic analysis model. Due to limitations in the SARCCS traffic analysis model, only 30 of the 32 study intersections were analyzed. The intersections of First Street/Pacific View Avenue and Magnolia Street/Atlanta Avenue were excluded. In order to determine the Year 2020 General Plan Buildout traffic volumes in the project vicinity based on several different potential build-out roadway network scenarios, model runs of the Year 2020 General Plan Buildout SARCCS were conducted without and with proposed project traffic for four roadway network scenarios, listed as follows:

1. With Hamilton Avenue Extension, Walnut Avenue Alignment, and the Santa Ana River Crossings (Current General Plan Circulation Element Network)
2. Without Hamilton Avenue Extension, but with Walnut Avenue Alignment and the Santa Ana River Crossings
3. Without Hamilton Avenue Extension and Walnut Avenue Alignment, but with the Santa Ana River Crossings
4. Without Hamilton Avenue Extension, Walnut Avenue Alignment, and the Santa Ana River Crossings

The Hamilton Avenue Extension refers to the potential future connection of Hamilton Avenue between Newland Street and Beach Boulevard through the existing wetland consistent with the General Plan Circulation Element. The Walnut Avenue Alignment refers to the extension of Walnut Avenue between Second Street and First Street to align with future Pacific View Avenue through the proposed project. The Santa Ana River Crossings refer to future bridge crossings of the Santa Ana River channel at Garfield Avenue/Gisler Avenue and Banning Avenue/19th Street to connect Costa Mesa and Huntington Beach.

Intersection capacity analyses and roadway segment capacity analyses have been conducted for General Plan Build-out roadway network scenario No. 1 only, which is consistent with the City's current General Plan Circulation Element network. The remaining three General Plan Buildout roadway network scenarios were used to analyze their effect on Pacific View Avenue through the project site between 1st and Huntington Streets.

Intersection Analysis under Scenario No. 1

The peak hour LOS results at the 30 key study intersections for the Year 2020 General Plan Buildout condition under scenario No. 1, without and with the proposed project-related traffic, are summarized in Table 3.14-15.

Table 3.14-15 Year 2020 General Plan Buildout Peak Hour Intersection Levels of Service Summary—w/Hamilton Ext. w/Walnut Alignment w/SARC

Key Intersections	Time Period	(1) Year 2020 Without Project Traffic		(2) Year 2020 With Project Traffic		(3) Project Impact/ Significance		(4) Year 2020 With Mitigation	
		ICU	LOS	ICU	LOS	ICU Inc.	Y/N	ICU	LOS
1. Goldenwest Street at Pacific Coast Highway	A.M.	0.588	A	0.600	A	0.012	N	—	—
	P.M.	0.728	C	0.746	C	0.018	N	—	—
2. 17th Street at Pacific Coast Highway	A.M.	0.624	B	0.638	B	0.014	N	—	—
	P.M.	0.677	B	0.699	B	0.022	N	—	—
3. 9th Street at Pacific Coast Highway	A.M.	0.607	B	0.621	B	0.014	N	—	—
	P.M.	0.596	A	0.618	A	0.022	N	—	—
4. 6th Street at Pacific Coast Highway	A.M.	0.641	B	0.654	B	0.013	N	—	—
	P.M.	0.724	C	0.744	C	0.020	N	—	—
5. Main Street at 6th Street	A.M.	0.249	A	0.261	A	0.012	N	—	—
	P.M.	0.424	A	0.451	A	0.027	N	—	—
6. Main Street at Pacific Coast Highway	A.M.	0.778	C	0.790	C	0.012	N	—	—
	P.M.	0.869	D	0.888	D	0.019	N	—	—
7. First Street at Atlanta Avenue	A.M.	0.210	A	0.226	A	0.016	N	—	—
	P.M.	0.267	A	0.318	A	0.051	N	—	—
8. First Street at Pacific Coast Highway	A.M.	0.648	B	0.648	B	0.000	N	—	—
	P.M.	0.636	B	0.691	B	0.055	N	—	—
9. Huntington Street at Atlanta Avenue	A.M.	0.242	A	0.266	A	0.024	N	—	—
	P.M.	0.338	A	0.353	A	0.015	N	—	—
10. Delaware Street at Atlanta Avenue	A.M.	0.212	A	0.248	A	0.036	N	—	—
	P.M.	0.271	A	0.391	A	0.120	N	—	—
11. Huntington Street at Pacific Coast Highway	A.M.	0.634	B	0.685	B	0.051	N	—	—
	P.M.	0.606	B	0.732	B	0.126	N	—	—
12. Huntington Street at Pacific View Avenue	A.M.	0.125	A	0.278	A	0.153	N	—	—
	P.M.	0.192	A	0.367	A	0.175	N	—	—
13. Beach Boulevard at Adams Avenue	A.M.	0.651	B	0.678	B	0.027	N	—	—
	P.M.	0.820	D	0.849	D	0.029	N	—	—
14. Beach Boulevard at Indianapolis Avenue	A.M.	0.413	A	0.439	A	0.026	N	—	—
	P.M.	0.557	A	0.593	A	0.036	N	—	—
15. Beach Boulevard at Atlanta Avenue	A.M.	0.408	A	0.452	A	0.044	N	—	—
	P.M.	0.722	C	0.783	C	0.061	N	—	—
16. Beach Boulevard at Pacific Coast Highway	A.M.	0.693	B	0.712	C	0.019	N	—	—
	P.M.	0.762	C	0.795	C	0.033	N	—	—
17. Newland Street at Atlanta Avenue	A.M.	0.329	A	0.333	A	0.004	N	—	—
	P.M.	0.512	A	0.523	A	0.011	N	—	—
18. Newland Street at Pacific Coast Highway	A.M.	0.745	C	0.763	C	0.018	N	—	—
	P.M.	0.665	B	0.699	B	0.034	N	—	—

Table 3.14-15 Year 2020 General Plan Buildout Peak Hour Intersection Levels of Service Summary—w/Hamilton Ext. w/Walnut Alignment w/SARC

Key Intersections	Time Period	(1) Year 2020 Without Project Traffic		(2) Year 2020 With Project Traffic		(3) Project Impact/Significance		(4) Year 2020 With Mitigation	
		ICU	LOS	ICU	LOS	ICU Inc.	Y/N	ICU	LOS
19. Magnolia Street at Pacific Coast Highway	A.M.	0.759	C	0.777	C	0.018	N	—	—
	P.M.	0.782	C	0.809	D	0.027	N	—	—
20. Pacific Coast Highway at Seapoint Avenue	A.M.	0.882	D	0.896	D	0.014	N	0.784	C
	P.M.	0.952	E	0.974	E	0.022	Y	0.929	E
21. Pacific Coast Highway at Warner Avenue	A.M.	0.796	C	0.806	D	0.010	N	—	—
	P.M.	0.882	D	0.897	D	0.015	N	—	—
22. Pacific Coast Highway at Brookhurst Street	A.M.	0.887	D	0.900	D	0.013	N	—	—
	P.M.	0.705	C	0.742	C	0.037	N	—	—
23. Main Street at Adams Avenue	A.M.	0.634	B	0.646	B	0.000	N	—	—
	P.M.	0.718	C	0.740	C	0.012	N	—	—
24. Main Street at Utica Avenue	A.M.	0.626	B	0.632	B	0.006	N	—	—
	P.M.	0.495	A	0.506	A	0.011	N	—	—
25. Lake Street at Adams Avenue	A.M.	0.652	B	0.658	B	0.006	N	—	—
	P.M.	0.668	B	0.677	B	0.009	N	—	—
26. Lake Street at Yorktown Avenue	A.M.	0.563	A	0.570	A	0.007	N	—	—
	P.M.	0.510	A	0.525	A	0.015	N	—	—
27. Beach Boulevard at Yorktown Avenue	A.M.	0.724	C	0.748	C	0.024	N	—	—
	P.M.	0.871	D	0.893	D	0.022	N	—	—
28. Beach Boulevard at Garfield Avenue	A.M.	0.766	C	0.784	C	0.018	N	—	—
	P.M.	0.878	D	0.900	D	0.022	N	—	—
29. Beach Boulevard at Ellis Avenue/ Main Street	A.M.	0.691	B	0.701	B	0.010	N	—	—
	P.M.	0.798	C	0.814	D	0.016	N	—	—
30. Beach Boulevard at Pacific View Avenue	A.M.	0.468	A	0.506	A	0.038	N	—	—
	P.M.	0.669	B	0.696	B	0.027	N	—	—

Bold V/C and LOS values indicate adverse service levels based on City LOS Standards

SOURCE: Linscott, Law & Greenspan 2003a

Future Year 2020 Without Proposed Project

As shown in Table 3.14-15, without the proposed project-related traffic, one of the thirty key study intersections (Seapoint Avenue and PCH) would operate at adverse LOS E ($V/C = 0.952$) during the P.M. peak hour based on the SARCCS traffic model data. The remaining 29 intersections are forecast to operate at LOS D or better during the A.M. and P.M. peak hours.

Future Year 2020 With Proposed Project

When the proposed project-related traffic is added to the future Year 2020 General Plan Buildout condition, the same intersection (Seapoint Avenue at PCH) would continue to operate at adverse LOS E during the P.M. peak hour. Although the addition of the proposed project traffic would increase the ICU at

this intersection by 0.022, the ultimate level of service would remain the same as the Year 2020 background conditions. The remaining 29 intersections were forecasted to operate at LOS D or better during the A.M. and P.M. peak hours. These projected A.M. and P.M. peak hour traffic volumes for the Year 2020 are illustrated in Figures 3.14-12 and 3.14-13, respectively.

In addition, the projected ADT volumes, which represent the Year 2020 conditions with the proposed project, are illustrated in Figure 3.14-14.

Roadway Segment Analysis under Scenario No. 1

The Daily Level of Service results at the 27 key roadway segments analyzed for the Year 2020 General Plan Buildout condition under Scenario No. 1, without and with the proposed project-related traffic, are summarized in Table 3.14-16.

Future Year 2020 Without Proposed Project

As shown, without project traffic for the Year 2020 General Plan Buildout condition, six of the 27 roadway segments are expected to operate at adverse LOS D or worse. These 6 roadway segments with adverse service levels without project traffic include

- PCH: Goldenwest Street to 6th Street (LOS D, $V/C = 0.881$)
- PCH: 6th Street to First Street (LOS D, $V/C = 0.881$)
- PCH: First Street to Huntington Street (LOS D, $V/C = 0.867$)
- PCH: Newland Street to Magnolia Street (LOS F, $V/C = 1.025$)
- PCH: Magnolia Street to Brookhurst Street (LOS F, $V/C = 1.005$)
- Beach Boulevard: Garfield Avenue to Ellis/Main Avenue (LOS D, $V/C = 0.828$)

The remaining 21 roadway segments are expected to operate at LOS C or better on a daily basis, without the proposed project traffic.

Future Year 2020 With Proposed Project

As shown in Table 3.14-16, when the proposed project traffic is added to the Year 2020 General Plan Buildout condition under Scenario No. 1, the same 6 study roadway segments would continue to operate at the same unsatisfactory LOS. In addition, 3 of the 6 roadway segments would also experience a V/C increase greater than 0.030, while 1 roadway segment (PCH: First Street to Huntington Street) would experience a decrease in V/C upon addition of the proposed project traffic. However, based on the City's impact criteria for roadway links, none of the study roadway link has an adjacent study intersection with

adverse LOS with the addition of project traffic. The remaining 21 roadway links are expected to operate at LOS C or better on a daily basis, with the addition of project traffic.

Table 3.14-16 Year 2020 General Plan Buildout Roadway Link Capacity Analysis Summary w/Hamilton Ext. w/Walnut Alignment w/Santa Ana River Crossing

<i>Arterial</i>	<i>General Plan Capacity</i>	<i>Lanes</i>	<i>2020 Without Project</i>			<i>2020 With Project</i>			<i>V/C Increase</i>
			<i>Daily Volume</i>	<i>V/C Ratio</i>	<i>LOS</i>	<i>Daily Volume</i>	<i>V/C Ratio</i>	<i>LOS</i>	
PCH Warner Avenue to Seapoint Avenue	91,200	6	50,200	0.550	A	51,985	0.570	A	0.020
PCH Seapoint Avenue to Goldenwest Ave	91,200	6	45,900	0.503	A	47,685	0.523	A	0.020
PCH Goldenwest Street to 6th Street	56,300	6	49,600	0.881	D	52,670	0.936	D	0.055
PCH 6th Street to First Street	56,300	6	49,600	0.881	D	52,670	0.936	D	0.055
PCH First Street to Huntington Street	56,300	6	48,800	0.867	D	47,310	0.840	D	-0.026
PCH Newland Street to Magnolia Street	56,300	6	57,700	1.025	F	58,600	1.041	F	0.016
PCH Magnolia Avenue to Brookhurst Ave	56,300	6	56,600	1.005	F	57,248	1.017	F	0.012
Atlanta Avenue First Street to Huntington Street	37,500	4	12,000	0.320	A	12,277	0.327	A	0.007
Atlanta Avenue Huntington Street to Delaware Street	37,500	4	12,000	0.320	A	14,231	0.379	A	0.059
Huntington Street Atlanta Avenue to Indianapolis Ave	12,500	2	2,700	0.216	A	2,777	0.222	A	0.006
Huntington Street Atlanta Avenue to Pacific View Ave	18,000	2	2,400	0.133	A	4,436	0.246	A	0.113
Pacific View Avenue East of Huntington Street	37,500	4	2,100	0.056	A	8,212	0.219	A	0.163
Main Street 6th Street to Palm Avenue	25,000	4	8,400	0.336	A	9,273	0.371	A	0.035
Main Street Palm Avenue to Adams Avenue	25,000	4	12,000	0.480	A	12,873	0.515	A	0.035
Lake Street Indianapolis Ave to Adams Avenue	37,500	4	6,900	0.184	A	7,285	0.194	A	0.010
Lake Street Utica Avenue to Yorktown Avenue	37,500	4	8,500	0.227	A	8,885	0.237	A	0.010
Indianapolis Avenue Beach Blvd to Delaware Street	25,000	4	7,700	0.308	B	7,895	0.316	A	0.008
Atlanta Avenue Beach Blvd to Newland Street	37,500	4	18,900	0.504	A	19,566	0.522	A	0.018

Table 3.14-16 Year 2020 General Plan Buildout Roadway Link Capacity Analysis Summary w/Hamilton Ext. w/Walnut Alignment w/Santa Ana River Crossing

<i>Arterial</i>	<i>General Plan Capacity</i>	<i>Lanes</i>	<i>2020 Without Project</i>			<i>2020 With Project</i>			<i>V/C Increase</i>
			<i>Daily Volume</i>	<i>V/C Ratio</i>	<i>LOS</i>	<i>Daily Volume</i>	<i>V/C Ratio</i>	<i>LOS</i>	
Adams Avenue Beach Blvd to Newland Street	37,500	4	29,400	0.784	C	29,985	0.800	C	0.016
Newland Street Indianapolis Ave to Atlanta Avenue	25,000	4	9,400	0.376	A	9,498	0.380	A	0.004
Beach Boulevard Indianapolis Ave to Adams Avenue	75,100	8	36,600	0.487	A	40,038	0.533	A	0.046
Beach Boulevard Indianapolis Ave to Atlanta Avenue	75,100	8	31,800	0.423	A	35,579	0.474	A	0.050
Beach Boulevard Atlanta Avenue to PCH	75,100	8	23,400	0.312	A	26,004	0.346	A	0.035
Pacific View Avenue First Street to Huntington Street	37,500	4	1,447	0.039	A	8,488	0.226	A	0.188
First Street Atlanta Avenue to Pacific View Ave	37,500	4	5,000	0.133	A	6,648	0.177	A	0.044
Beach Boulevard Yorktown Avenue to Adams Avenue	75,100	8	48,500	0.646	B	51,633	0.688	B	0.042
Beach Boulevard Garfield Avenue to Ellis/Main Street	75,100	8	62,200	0.828	D	64,846	0.863	D	0.035

Bold V/C and LOS values indicate adverse service levels based on City and/or CMP LOS Standards

SOURCE: Linscott, Law & Greenspan 2003a

Year 2020 Pacific View Avenue Traffic Conditions

The recommended buildout cross-section for the future section of Pacific View Avenue, located between 1st and Huntington Streets adjacent to the proposed project site, was determined by calculating the Year 2020 General Plan Buildout daily traffic volume forecasts with the proposed project-related traffic for the four (4) roadway network scenarios described above. The results are listed as follows:

- Scenario No. 1: 10,978 VPD
- Scenario No. 2: 8,488 VPD
- Scenario No. 3: 8,064 VPD
- Scenario No. 4: 8,064 VPD

The buildout traffic volumes were forecast based on related project daily traffic, proposed project-related daily traffic, and ambient growth at 1 percent per year applied to the Year 2008 daily forecast as well as reference to the SARCCS traffic model data for each scenario. In addition, it was assumed that 5 percent of the Year 2020 General Plan Buildout daily traffic on PCH at First Street will relocate to Pacific View

Avenue with the completion of the current General Plan Circulation Element network (Scenario No. 1) based on the relation between the daily forecast traffic on Pacific View Avenue and PCH without project traffic. Scenario No. 2 assumed no additional relocated traffic because of the discontinuity along Pacific View Avenue as a result of the lack of the Walnut Avenue connection. Scenario No. 3 and Scenario No. 4 assumed 5 percent less traffic than Scenario No. 2, based on the relation of the modeled daily forecast traffic on Pacific View Avenue, with project traffic, between Scenario Nos. 3/4 and Scenario No. 2, which is approximately 5 percent (1,900 vs. 2000).

As a result, based on the forecast Year 2020 General Plan Buildout daily traffic volumes for each of the four scenarios, Pacific View Avenue is expected to operate at LOS B or better as a two-lane divided roadway between 1st and Huntington Streets.

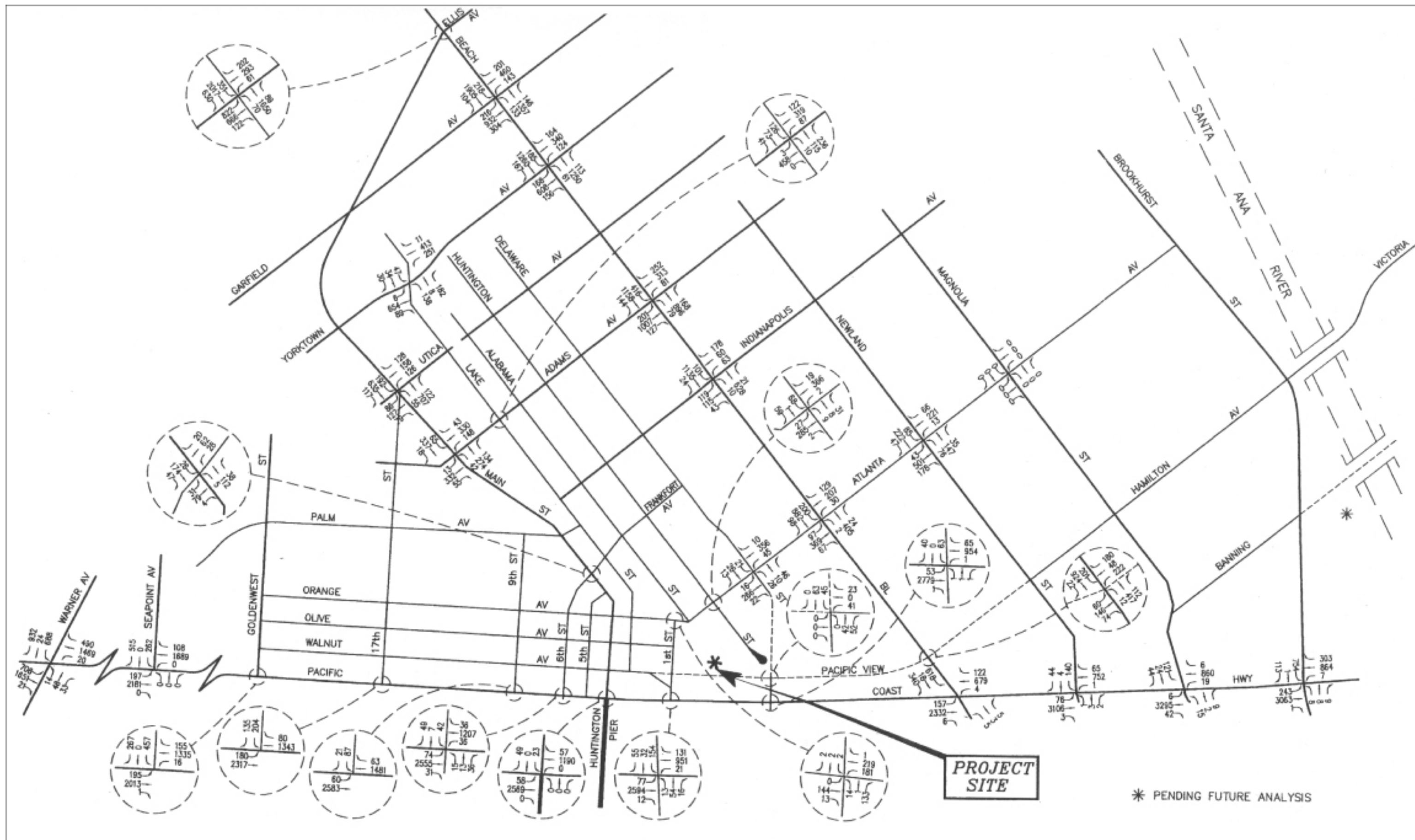
Identification of Project Impacts

Impact TR-1 Under Year 2008 conditions, implementation of the proposed project would significantly affect the operating conditions of the intersection of PCH at Warner Avenue by increasing traffic volume.

City Criteria

The Year 2008 peak hour intersection capacity analysis performed using the City criteria, as summarized in Table 3.14-12, shows that the intersection of PCH at Warner Avenue would operate at LOS E and LOS F during the A.M. and P.M. peak hour, respectively. These levels are beyond the acceptable maximum level of service.

Table 3.14-12 shows that this intersection would still operate at the same unsatisfactory levels of service during the A.M. and P.M. peak hours without addition of proposed project traffic. An analysis of Year 2008 background conditions, which consist of ambient traffic and cumulative projects traffic, indicates that the forecast increase in background traffic alone would result in LOS E and LOS F during the A.M. and P.M. peak hour at the intersection of PCH and Warner Avenue. The addition of the proposed project traffic would result in an increase in the ICU at this intersection of 0.015 in the A.M. peak hour and 0.022 in the P.M. peak hour and further worsen intersection operations. Therefore, under City criteria, impacts at this intersection would be potentially significant.



Not to Scale

SOURCE: Linscott Law & Greenspan 2003a

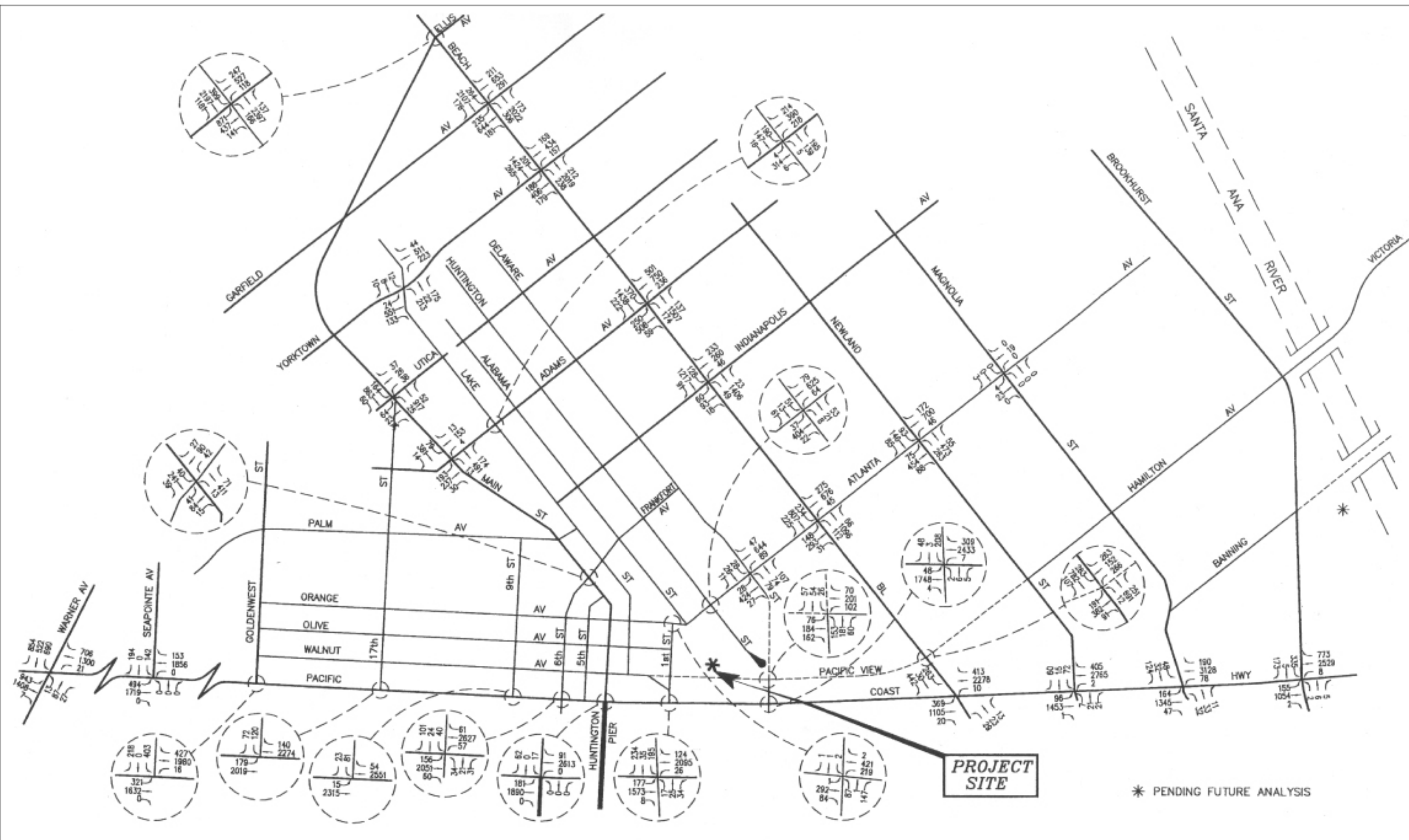


EIP
ASSOCIATES

10261-00

FIGURE 3.14-12
2020 General Plan Buildout AM Peak Hour Volumes with Project Traffic

City of Huntington Beach • Pacific City EIR



Not to Scale

SOURCE: Linscott Law & Greenspan 2003a

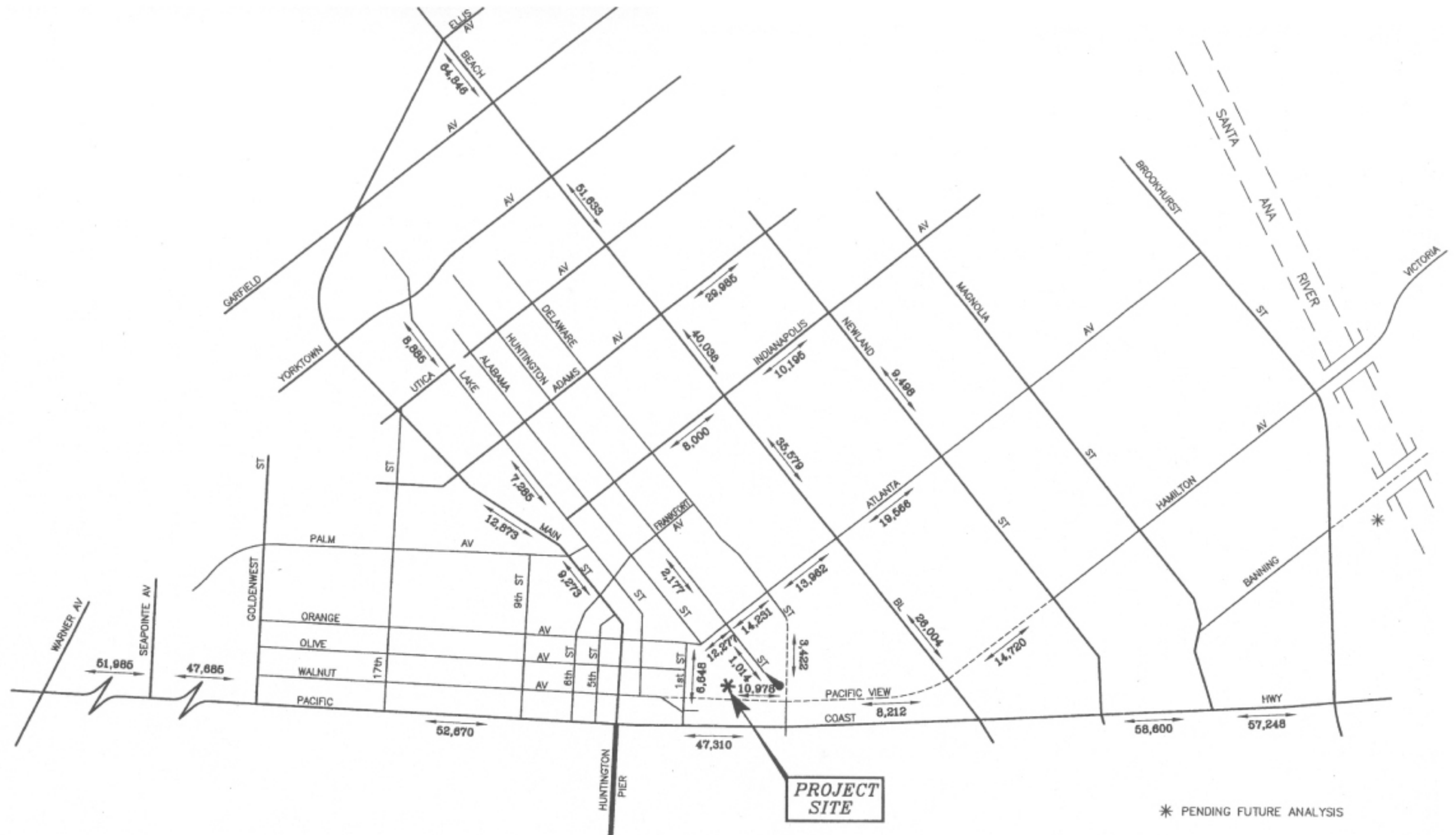


EIP
ASSOCIATES

2020 General Plan Buildout PM Peak Hour Volumes with Project Traffic

FIGURE 3.14-13

City of Huntington Beach • Pacific City EIR



Caltrans Methodology

Under the State of California (Caltrans) Methodology, the Year 2008 peak hour intersection capacity analysis, as summarized in Table 3.14-13, shows that the intersection of PCH at Warner Avenue would operate at LOS F during both A.M. and P.M. peak hours, which is an unsatisfactory LOS. Table 3.14-13 shows that this intersection would still operate at the same LOS during the A.M. and P.M. peak hours without addition of proposed project traffic. The Year 2008 background conditions indicate that the forecast increase in background traffic alone would result in the same unsatisfactory LOS at the intersection of PCH and Warner Avenue. The addition of the proposed project traffic would increase the HCM at this intersection and further worsen intersection operations. Therefore, under Caltrans methodology, impacts at this intersection would be potentially significant.

Impact TR-2 Under Year 2008 conditions, implementation of the proposed project would significantly affect the operating conditions of the intersection of PCH at Seapoint Avenue by increasing traffic volume under Caltrans Methodology.

Under the State of California (Caltrans) Methodology, the Year 2008 peak hour intersection capacity analysis, as summarized in Table 3.14-13, shows that the intersection of PCH at Seapoint Avenue would operate at LOS E during P.M. peak hour with the proposed project traffic, which is an unsatisfactory LOS. Table 3.14-13 shows that this intersection would still operate at the same LOS during the A.M. and P.M. peak hours without addition of proposed project traffic. The Year 2008 background conditions indicate that the forecast increase in background traffic alone would result in the same unsatisfactory LOS at the intersection of PCH and Seapoint Avenue. The addition of the proposed project traffic would increase the HCM at this intersection and further worsen intersection operations. Therefore, under Caltrans methodology, impacts at this intersection would be potentially significant.

Impact TR-3 Under Year 2008 conditions, implementation of the proposed project would not significantly adversely affect the operating conditions of roadway segments by increasing traffic volume.

Analysis of the Year 2008 roadway segment capacities at the 25 study roadway segments, which is summarized in Table 3.14-14, shows that unsatisfactory LOS would be expected to occur at the following seven roadway segments due to background traffic conditions:

- PCH: Goldenwest Street to 6th Street ($v/c = 1.139$, LOS F)
- PCH: Huntington Street to Beach Boulevard ($v/c = 1.160$, LOS F)
- PCH: Beach Boulevard to Newland Street ($v/c = 0.828$, LOS D)

- PCH: Magnolia Street to Brookhurst Street ($v/c = 0.826$, LOS D)
- Beach Boulevard: Adams Avenue to Yorktown Avenue ($v/c = 0.821$, LOS D)
- Beach Boulevard: Garfield Avenue to Main Street ($v/c = 0.905$, LOS E)
- Atlanta Avenue: First Street to Huntington Street ($v/c = 0.825$, LOS D)

As shown in Table 3.14-14, aside from the Atlanta Avenue segment between First Street and Huntington Street, the other 6 study roadway segments identified above would continue to operate at the same adverse LOS with the addition of the proposed project traffic when compared to the City criteria, and each of these 6 study segments would also experience a V/C increase greater than 0.030. None of the study roadway segments, however, has an adjacent study intersection(s) with adverse LOS with the addition of project traffic. Therefore, impacts on these roadway segments would be less than significant.

Impact TR-4 Under the Year 2020 conditions with scenario No. 1 (with the Hamilton Avenue Extension, Walnut Avenue Alignment, and Santa Ana River Crossings), the proposed project would adversely affect the operating conditions of the intersection of PCH at Seapoint Avenue by increasing traffic volume.

The Year 2020 General Plan Buildout Peak Hour Intersection Capacity Analysis under scenario No. 1 (with the Hamilton Avenue Extension, Walnut Avenue Alignment, and Santa Ana River Crossings) at the 30 key intersections without and with the proposed project traffic is summarized in Table 3.14-15. As shown, the following key study intersection would operate at LOS E under 2020 General Plan Buildout Conditions, while the remaining 29 key study intersections are forecast to operate at LOS D or better during the A.M. and P.M. peak hours:

- Seapoint Avenue at PCH (LOS E during P.M. peak hour)

The addition of the proposed project traffic would increase the ICU at this intersection by 0.022, and further worsen intersection operations. Therefore, impacts at this intersection would be potentially significant.

Impact TR-5 Under the Year 2020 conditions with scenario No. 1 (with the Hamilton Avenue Extension, Walnut Avenue Alignment, and Santa Ana River Crossings), the proposed project would not adversely affect the operating conditions of roadway segments by increasing traffic volume.

The Year 2020 General Plan Buildout Daily Roadway Link Capacity Analysis under Scenario No. 1 at the 27 study roadway segments without and with the proposed project traffic are summarized in Table 3.14-16. As

shown, the following 6 roadway segments would operate at unsatisfactory LOS without the proposed project traffic:

- PCH: Goldenwest Street to 6th Street ($v/c = 0.881$, LOS D)
- PCH: 6th Street to First Street ($v/c = 0.881$, LOS D)
- PCH: First Street to Huntington Street ($v/c = 0.867$, LOS D)
- PCH: Newland Street to Magnolia Street ($v/c = 1.025$, LOS F)
- PCH: Magnolia Avenue to Brookhurst Avenue ($v/c = 1.005$, LOS F)
- Beach Boulevard: Garfield Avenue to Ellis/Main Street ($v/c = 0.828$, LOS D)

When the proposed project traffic is added to the Year 2020 General Plan Buildout analysis under Scenario No. 1, the ultimate LOS at these 6 intersections would still remain the same as compared to the Year 2020 background conditions, although the V/C ratio would increase, and further worsen roadway operations.

As shown in Table 3.14-14, the 6 study roadway segments identified above would continue to operate at the same adverse LOS with the addition of the proposed project traffic when compared to the City criteria; 3 of the study segments would also experience a V/C increase greater than 0.030 (PCH—Goldenwest Street to 6th Street; PCH—6th Street to First Street; Beach Boulevard—Garfield Avenue to Ellis/Main Street). None of the study roadway segments, however, has an adjacent study intersection(s) with adverse LOS with the addition of project traffic. Therefore, impacts on these roadway segments would be less than significant.

Impact TR-6 Project-generated traffic would require the addition of traffic signals.

A traffic signal is proposed at Huntington Street and Atlanta Avenue. In order to determine whether any of the other key unsignalized study intersections warrant signalization under existing, background, or background plus project traffic conditions, signal warrant analyses were conducted at the following key unsignalized study intersections:

- First Street at Atlanta Avenue (All-Way Stop)
- Huntington Street at Pacific View Avenue (One-Way Stop/existing & Two-Way Stops/future)
- Pacific View Avenue at First Street (One-Way/future Stop)

The detailed warrant analysis worksheets for the analyzed locations are included in Appendix F of the Traffic Impact Analysis Report. The signal warrant analyses were based on criteria presented in the Caltrans *Traffic Manual*, Chapter 9: *Traffic Signals and Lighting*. Using the existing hourly and peak hour data collected at these intersections and using future with project peak hour and daily traffic volumes, signal warrant analyses

were conducted using the peak hour volume warrant and planning warrant (Caltrans Figure 9.4) at the 3 unsignalized intersections.

Based on an analysis of the applicable warrants, Year 2008 conditions without and with proposed project traffic indicated that none of the 3 key unsignalized study intersections satisfy the peak hour traffic signal warrant. In addition, using the planning warrant and Year 2008 and Year 2020 daily traffic at the Huntington Street/Pacific View Avenue intersection, the signal warrant was not satisfied. However, using the planning warrant, the intersection of First Street and Atlanta Avenue satisfied the traffic signal warrant. This intersection would require a traffic signal due to existing traffic with the addition of ambient growth. The proposed project would add to the need for a traffic signal at this location. In the absence of a traffic signal at this location, impacts would be potentially significant.

Impact TR-7 Implementation of the proposed project would not adversely affect the operating conditions of nearby facilities or streets that are part of the Congestion Management Program Highway System (CMPHS).

As shown in Table 3.14-10, the proposed project is projected to generate approximately 12,002 daily trip-ends, which meets the criteria requiring a CMP traffic impact analysis. The CMP highway system arterial facilities and CMP arterials closest to the proposed project site consist of Beach Boulevard, PCH, and Warner Avenue. The CMP arterial monitoring locations/intersections nearest to the project site include Warner Avenue at PCH, Beach Boulevard at PCH, and Beach Boulevard at Adams Avenue.

Based on project trip generation estimates and trip distribution patterns, the amount of project traffic using these CMP facilities indicates that only 1 of the 3 CMP intersections would exceed the 3 percent threshold established by the CMP. The intersection of Beach Boulevard at PCH is expected to have a 4.5 percent increase. However, projected intersection operations at this intersection would be within acceptable LOS (LOS A in the A.M. peak hour and LOS D in the P.M. peak hour in 2008 under City criteria, and LOS C in the A.M. and P.M. peak hour in 2020). Therefore, impacts to the CMPHS would be less than significant.

Impact TR-8 The proposed project would provide adequate parking.

The parking conditions associated with the proposed project consist of off-site parking supply and demand adjacent to the project site, and on-site parking supply and demand provided within subterranean parking structures below both the retail/restaurant/office/hotel and residential developments.

Off-Site Parking

As presented in Figure 3.14-5, there are currently 102 parking spaces (98 metered spaces and 100 feet of unrestricted parking, or approximately 4 spaces) on both sides of First Street, Atlanta Avenue, and PCH

adjacent to the project site. Out of the 102 parking spaces, 69 parking spaces abut the project site (referred to in this discussion as the “off-site parking spaces”). The remaining 33 parking spaces surrounding the project site would not be reconfigured as a result of project implementation, and thus, are not included as part of this discussion. Figure 3.14-15 indicates the proposed number of off-site parking spaces that would be provided upon implementation of the proposed project.

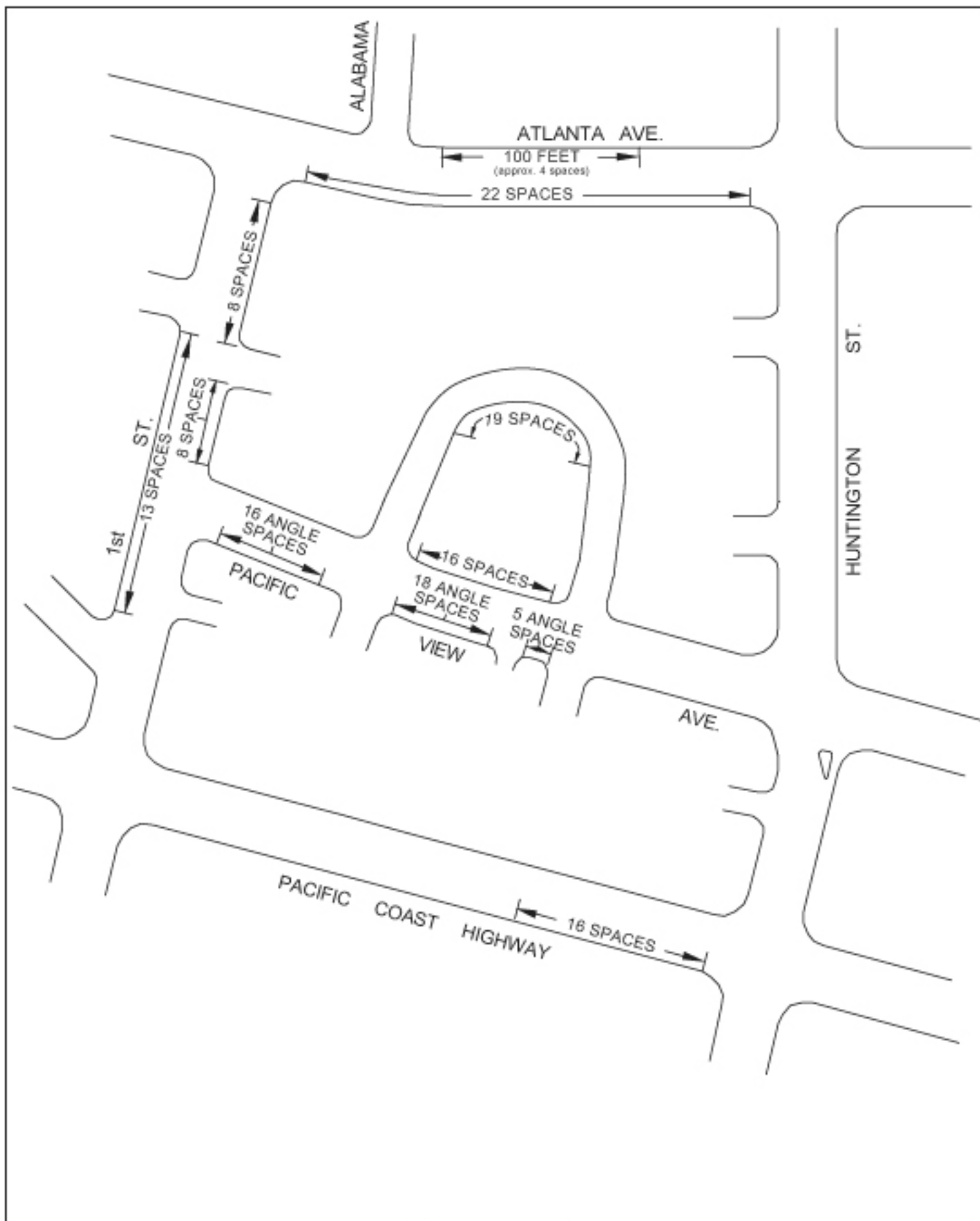
Table 3.14-17 identifies the number of off-site parking spaces provided in the long-term as a result of the proposed project. A total of 27 spaces would be removed along PCH, 22 spaces would be removed along First Street, and four spaces would be removed along Atlanta Avenue, for a total loss of 53 spaces. However, as shown in the table, additional parking spaces would be provided in the subterranean garage to account for this loss.

Table 3.14-17 Long-Term Parking Plan for Existing Off-Site Parking Spaces		
Street	Existing Spaces	Post-Project
First Street	38	16
Atlanta Avenue	4	0 ¹
Pacific Coast Highway	27	0
Huntington Street	0	0
<i>Subtotal</i>	69	16
Replacement Spaces in Garage	N/A	53 ²
Total	69	69
<ol style="list-style-type: none"> Atlanta Avenue would have an additional 22 spaces located on the south side west of Huntington Street in the short-term. However, in the long-term when Atlanta Avenue is fully improved pursuant to the General Plan Circulation Element, there would be no parking that abuts the project site on Atlanta Avenue. Approximately 53 off-site parking spaces would be eliminated from the project perimeter frontage and would be relocated to within the subterranean parking garage. 		

SOURCE: Hunsaker & Associates. Pacific City Tentative Tract No. 16338. July 2, 2003.

Off-site parking after project implementation would only be provided on Atlanta Avenue and First Street. In the short-term, a total of approximately 38 parking spaces would be provided on these two streets. This would include 16 parking spaces on the east side of First Street. The project would also add 18 spaces on the south side of Atlanta Avenue west of Huntington Street for a total of 22 parking spaces. These parking spaces on the south side of Atlanta Avenue would eventually be removed when Atlanta Avenue is fully improved between Huntington Street and Beach Boulevard. Thus, the only long-term, off-site parking would be on First Street, where 16 parking spaces would remain.

No parking spaces would be provided on either side of Huntington Street (consistent with existing conditions) or PCH under the proposed project, thus, eliminating the existing 27 metered parking spaces



Not to Scale

SOURCE: EIP Associates 2003



10261-00

EIP

ASSOCIATES

FIGURE 3.14-15
Proposed Street Parking

City of Huntington Beach • Pacific City EIR

along the north side of PCH. The existing parking spaces currently abutting the site, as shown in Figure 3.14-5, that are removed as a result of the proposed project would be replaced with on-site parking within the parking structure.

On-site street parking would include approximately 55 parking spaces on Pacific View Avenue (16 spaces on the north side and 39 spaces on the south side) and 19 parking spaces on the internal loop road. This is in addition to all required on-site parking that would be provided in the subterranean garages.

Shared Parking Analysis

The parking demand for the proposed project was calculated by using the shared parking criteria established by the Urban Land Institute (ULI) (Linscott Law & Greenspan Engineers 2003b). The basis for using this shared parking criteria stems from accumulated experience in parking demand characteristics, which indicates that a mixing of land uses (as proposed under the proposed project) results in an overall parking need that is less than the sum of the individual peak requirements for each land use. Shared Parking calculations recognize that different uses often experience individual peak parking demands at different times of day, or days of the week. When uses share a common parking footprint, the total number of spaces needed to support the collective whole is determined by adding parking profiles (by time of day or day of week), rather than individual peak ratios as represented in the City of Huntington Beach Zoning and Subdivision Ordinance (Chapter 231—Off-Street Parking and Loading Provisions). The shared parking methodology is applicable to the proposed project because the individual land uses (i.e., retail, restaurant, hotel and office uses) experience peak demands at different times of the day.

To account for parking demand interaction with the beach, adjacent resort hotels, surrounding residential neighborhoods, and Downtown parking supply, consistent with the traffic study for the proposed project and information provided in ULI's Shared Parking, which indicates non-auto use ranging from 10 percent to as much as 57 percent, a parking demand reduction was applied to the traffic generation forecast. The following assumptions were utilized in calculating shared parking projections:

- 20 percent City parking code reduction for restaurants to account for parking demand interaction with the beach, adjacent resort hotels, surrounding residential neighborhoods, and Downtown parking supply
- 15 percent City parking code reduction for retail to account for parking demand interaction with the beach, adjacent resort hotels, surrounding residential neighborhoods, and Downtown parking supply
- 5 percent City parking code reduction for office to account for parking demand interaction with the surrounding residential neighborhoods, and Downtown parking supply

- 25 percent non-guest use for hotel signature restaurant
- 10 percent non-guest use for hotel spa on weekdays and 25 percent non-guest use for Hotel Spa on weekends
- 85 percent non-guest use for hotel conference/meeting/banquet rooms on weekdays
- 75 percent non-guest use for hotel ballroom/banquet rooms on weekends

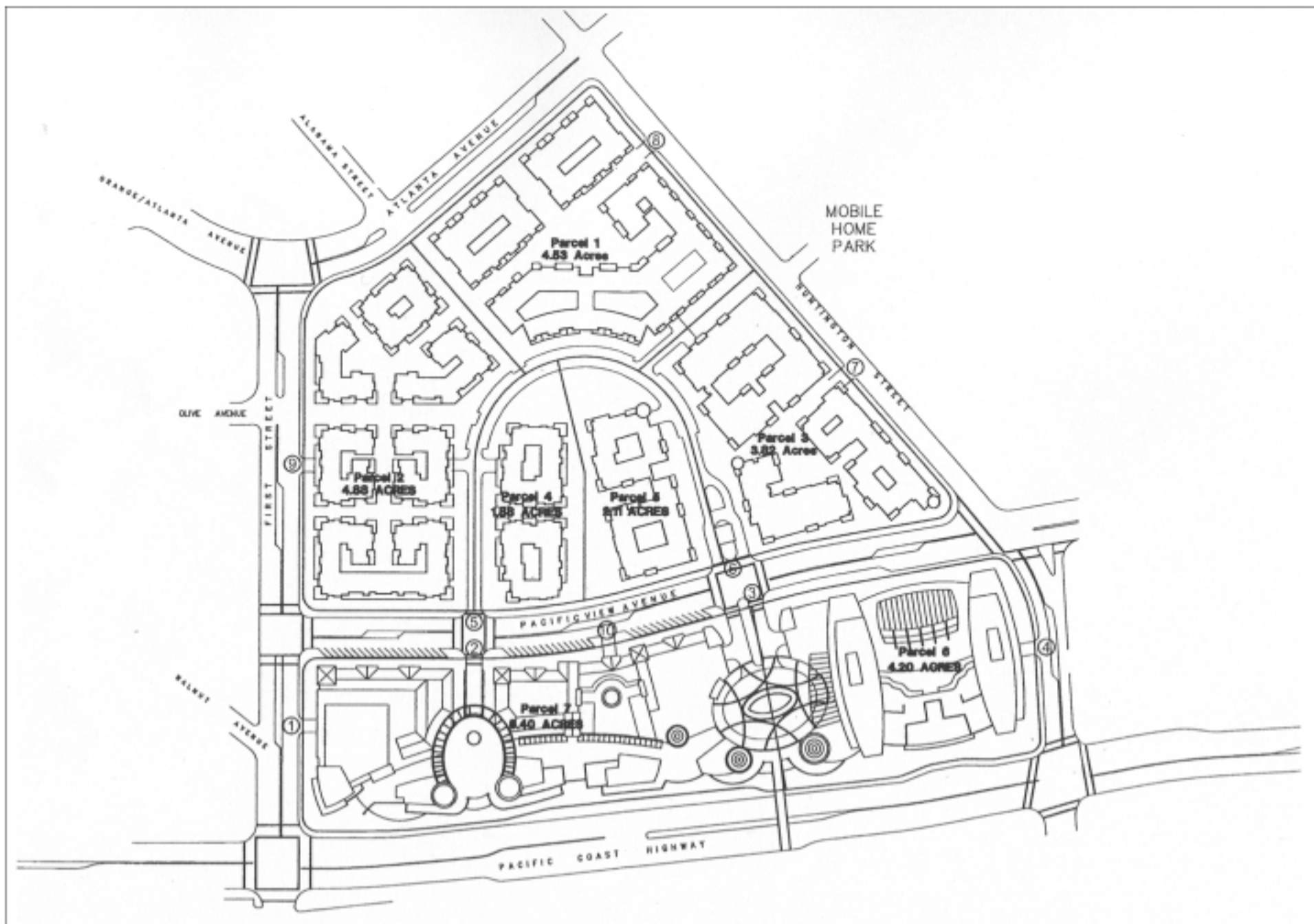
The Shared Parking Analysis concludes that the peak parking demand for the proposed project during a weekday totals 1,482 parking spaces and occurs at 1:00 P.M. The peak parking requirement for the proposed project during a weekend totals 1,347 parking spaces and also occurs at 1:00 P.M. As a result, with the addition of 53 spaces to be relocated on-site due to loss of off-street spaces, the total parking demand for the visitor-serving component of the proposed project is 1,535 parking spaces. Thus, with a proposed on-site parking supply of 1,543 parking spaces, a theoretical parking surplus of eight spaces is forecasted at peak demand times. At times other than peak parking demand times, the excess number spaces would be greater than eight spaces.

As a result, based on the shared parking demand analysis and with the addition of spaces to be relocated on-site, the total parking demand for the visitor-serving commercial component of the proposed project would be adequately served by the proposed parking supply. The residential parking demand would be based on City code and would, therefore, provide adequate parking within the residential site. The provision of adequate parking on site would ensure that the project would not result in parking demands at off-site locations, and impacts on parking would be less than significant.

Impact TR-9 The proposed project would provide adequate vehicular access driveways and would not result in inadequate emergency access.

The proposed project site would consist of a total of ten customer/service access driveways, as illustrated in Figure 3.14-16. The location of these access driveways and their description are as follows:

- First Street—Two driveways:
 - › Driveway #9—One right-in/right out for the residential use.
 - › Driveway #1—One right-in/right-out service access for the retail/commercial use.
- Huntington Street—Three driveways:
 - › Driveway #8—Full-movement for the residential use.
 - › Driveway #7—Full-movement for the residential use.
 - › Driveway #4—One right-in/right-out service/employee access for the hotel use.



Not to Scale

SOURCE: Linscott Law & Greenspan 2003a



EIP
ASSOCIATES

FIGURE 3.14-16
Proposed Site Plan

City of Huntington Beach • Pacific City EIR

■ Pacific View Avenue—Five driveways:

- › Driveway #2—Full-movement for the retail/restaurant/office uses
- › Driveway #3—Full-movement for the retail/restaurant/office and hotel uses.
- › Driveway #5—Full-movement for the residential use.
- › Driveway #6—Full-movement for the residential use.
- › Driveway #10—One right-in/right-out service access for the retail/restaurant uses.

All-way stop-control access would be provided along Pacific View Avenue at driveway access #2/#5 and #3/#6.

The easterly access on Pacific View Avenue would be designed as the main retail/commercial/hotel project access with a valet parking zone proposed on site. Intersection capacity analyses conducted at the two proposed all-way stop access locations along Pacific View Avenue, using Year 2008 A.M. and P.M. peak hour project buildout traffic volumes, determined that Driveway access #2/#5 would operate with an intersection stop delay of 7.86 seconds/vehicle (LOS A) and 8.78 seconds/vehicle (LOS A) during the A.M. and P.M. peak hours, respectively, while Driveway access #3/#6 would operate with an intersection stop delay of 8.74 seconds/vehicle (LOS A) and 10.58 seconds/vehicle (LOS B) during the A.M. and P.M. peak hours, respectively.

Based on the forecast traffic volumes and the capacity analyses at each of the ten project access driveways, the design features shown in Table 3.14-18 are proposed to ensure adequate operating characteristics of the project accesses. As shown in Table 3.14-18, Driveways #1, #4, and #10 would provide service access for the commercial component of the proposed project, while Driveways #2 and #3 would provide customer access to the commercial component. Thus, customers accessing the commercial component of the project site would not experience traffic congestion due to loading activities at the loading docks for the commercial uses at the project site.

The five access driveways proposed for the residential development would be gate controlled, with the three driveways on First Street, Huntington Street, and the westerly driveway on Pacific View Avenue for residents only, and the easterly driveway for residents and visitors. In addition, the two access drives along Pacific View Avenue into the parking structure for the Retail/Restaurant/Office and Hotel uses would be gate controlled with a ticket dispenser.

By using the Crommelin Methodology, which determines the minimum storage reservoir required to provide adequate access and control for major parking facilities, the required storage reservoir at each of the seven gated entries (five residential and two retail/restaurant/office/hotel access driveways) was

determined. This ensures that adequate storage capacities would be provided to ensure adequate levels of service of operating characteristics in and around the facility. Each of the five residential access driveways and two retail/restaurant/office/hotel access driveways would have a maximum expected queue of two vehicles, with a storage reservoir length of 44 feet between the gate and back of sidewalk. However, the visitor access driveway on Driveway #6 would require a storage reservoir length of 66 feet between the manned guard house and the back of the sidewalk. Driveway #6 would accommodate both residents and visitors with separate drive aisles for each, and could accommodate three vehicles between the manned guardhouse and the back of the sidewalk. A separate drive aisle would be provided for residents to by-pass visitors queuing at the manned guardhouse. Based on the results of this analysis, adequate driveway and queuing access for the proposed project would be provided, and impacts associated with vehicular access to the project site would be less than significant.

Table 3.14-18 Project Access Driveways

<i>Driveway No.</i>	<i>Access</i>	<i>Design Features</i>
1	Service access for Retail/Restaurant uses	Right-turn in/right-turn out only with one inbound and one outbound lane
2	Customer access for Retail/Restaurant/Office uses	Full-movement with all-way stop control with one inbound and two outbound lanes (left turn and right turn); westbound left turn pocket recommended minimum length of 100 feet on Pacific View Avenue
3	Customer access for Retail/Restaurant/Office and Hotel uses	Full-movement with all-way stop control; one inbound and two outbound lanes (left turn and right turn); westbound left turn pocket recommended minimum length of 200 feet on Pacific View Avenue.
4	Service and secondary employee access for Hotel use	Right-turn in/right-turn out only; one inbound and one outbound lane.
5	Resident-only access for Residential use	Full-movement with all-way stop control; one inbound and one outbound lane; eastbound left turn pocket recommended length of 100 feet on Pacific View Avenue.
6	Resident and visitor access for Residential use	Full-movement with all-way stop control; two inbound and two outbound lanes (left turn and right turn); eastbound left turn pocket recommended minimum length of 100 feet on Pacific View Avenue.
7	Resident-only access for Residential use	Full-movement with outbound stop control; one inbound and one outbound lane with 44-foot storage reservoir at gate; northbound left turn pocket recommended minimum length of 100 feet on Huntington Street.
8	Resident-only access for Residential use	Full-movement with outbound stop control; one inbound and one outbound lane with 44-foot storage reservoir at gate; northbound left turn pocket recommended minimum length of 100 feet on Huntington Street.
9	Resident-only access for Residential use	Right-turn in/right-turn out with outbound stop control; one inbound and one outbound lane with 44-foot storage reservoir at gate.
10	Service access for Retail/Restaurant uses	Right-turn in/right-turn out only with one inbound and one outbound lane.

Impact TR-10 The project would not substantially increase roadway hazards.

For the purposes of this analysis, roadway hazards are defined as changes to circulation patterns that could result in unsafe driving conditions. Examples include inadequate vision or stopping distance at

ingress/egress points, sharp roadway curves where there is an inability to see oncoming traffic, or vehicular/pedestrian traffic conflicts.

The traffic analysis performed for the proposed project did not identify any roadway hazards. The proposed extension of Pacific View Avenue would be constructed in accordance with the Precise Plan of Street Alignment 88-1. The street would be a two-lane roadway with parking on the south side of the street. Although no sharp curves would be associated with the roadway, the vertical contours of this roadway could present hazards and thus would require design consideration to meet design criteria. The project proposes adherence to the minimum design speed standards and the incorporation of appropriate traffic control devices in order to ensure no elevated risks associated with operations of this roadway. Street dimensions would also be constructed in accordance with City standards to permit the safe travel of vehicles on streets. Sidewalks would be provided on the north and south side of Pacific View Avenue, and pedestrian pathways on site would ensure separation of vehicular and pedestrian traffic.

Parking ramps would be constructed as access points into the subterranean garages for the commercial and residential portions of the proposed project at a grade of 10 percent and 15 percent, respectively. All commercial garage ramps would be designed to the City standard of 10 percent grade. A special permit would be required to allow three of the seven parking garage ramps to the residential uses to exceed the City standard of 10 percent. Ramps designed at 15 percent grade have an approximately 50 percent steeper incline than ramps constructed at 10 percent grade. This steeper incline allows traffic to move faster from one level to the next. Fifteen percent ramps are commonly used in similar residential projects in the region, because these ramps require less ground surface area and, therefore, they are less obtrusive to the architectural design of the building and allow for more open space. The ramps at 15 percent grade would be designed with a three-tiered transition, which would alleviate the steep incline of the ramp by allowing small plateaus to separate what would otherwise be a continuous steep incline. Impacts on roadway hazards would be less than significant.

Impact TR-11 The project would not conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks).

As discussed above, project implementation is anticipated to be consistent with local policies related to transportation, including the SCAG Regional Comprehensive Plan and Guide and the City of Huntington Beach General Plan Land Use and Transportation Elements. The project proposes an Orange County Transportation Authority (OCTA) bus turnout on the north side of PCH, west of Huntington Street. Aside from the proposed bus turnout, a bike lane on PCH would be provided.

In addition, based on a Huntington Beach Transportation Center Location Study, conducted in January 1980 by the Orange County Transit District, City of Huntington Beach, and PBQ&D, Inc., the following two sites were identified for detailed analysis in terms of being transportation centers:

- Goldenwest College/Huntington Center Area
- PCH/Lake Street Area¹⁰

The Goldenwest College/Huntington Center Area was developed with a transportation center along Gothard Street and provides bus layovers and transfers for the Orange County Transportation Authority (OCTA) as well as other transportation center facilities. The PCH and Lake Street Area has not been developed as a transportation center, but a 560-foot bus turnout has been installed along the south side of PCH between First Street and Huntington Street, which provide bus layovers and boarding for OCTA. Based on discussions with City Transportation staff regarding the potential for locating a transportation center in the PCH/Lake Street Area, it was determined that the existing bus turnout along the south side of PCH could be upgraded to accommodate additional transportation facilities, which would maximize consistency with City policies. Therefore, impacts would be less than significant.

3.14.5 Cumulative Impacts

The cumulative analysis considers cumulative projects identified to occur within the vicinity of the project site, in addition to General Plan buildout conditions identified to year 2020. The project-specific traffic analysis considers trips generated by cumulative projects in its development of future baseline conditions. Therefore, the cumulative impact analysis is incorporated into the Year 2008 and 2020 analyses presented in Section 3.14.4. As identified above, impacts would be cumulatively considerable at selected intersections.

3.14.6 Mitigation Measures and Residual Impacts

The following standard City requirements (CR) would apply to the project.

CR TR-A	<i>During grading and construction, on-site parking shall be provided for all construction workers and equipment unless approved otherwise by the Public Works Department.</i>
CR TR-B	<i>During grading and construction, the property owner is responsible for all required clean up of off-site dirt, pavement damage and/or restriping of the public rights-of-way as determined by the Public Works Department.</i>

¹⁰ The General Plan identifies this location as a potential site for a transportation center. The Downtown Specific Plan identifies the transportation center as a permitted use at this location.

- CR TR-C *A Transportation Demand Management Plan shall be submitted for review and approval prior to issuance of Certificate of Occupancy.*
- CR TR-D *A traffic control plan for all work within the City right-of-way and Caltrans right-of-way shall be submitted to the Public Works department for review and approval prior to issuance of a grading permit. The City's plans shall be prepared according to the Traffic Control Plan Preparation Guidelines. Plans for Pacific Coast Highway shall be per Caltrans requirements and subject to their review and approval.*
- CR TR-E *The developer shall coordinate the development of a truck haul route with the Department of Public Works if the import or export of material is required. This plan shall include the approximate number of truck trips and the proposed truck haul routes. It shall specify the hours in which transport activities can occur and methods to mitigate construction-related impacts to adjacent residents. These plans must be submitted for approval to the Department of Public Works prior to issuance of a grading permit.*
- CR TR-F *Traffic impact fees shall be paid at the rate calculated at the time of payment. The fee shall be based on the trip generation for the actual building square footage, units or rooms as applicable using methodology approved as part of the project traffic impact study.*

In addition to the standard City requirements listed above, mitigation measures (MM) would be required to address project impacts. The following mitigation measures would be required to address impacts to intersection operations, as described above under Impact TR-1, Impact TR-2, and Impact TR-4.

- MM TR-1 *The Applicant shall contribute a fair share contribution of 22 percent¹¹ to the installation of a third northbound through lane on PCH consistent with the Orange County MPAH and Caltrans Route Concept Study for PCH. The County of Orange and Caltrans would complete this improvement. The Applicant's fair share contribution shall be paid prior to issuance of a certificate of occupancy.*
- MM TR-2 *A second westbound right turn lane shall be added on Seapoint Avenue. The City shall ensure completion of this improvement, and the Applicant shall contribute a fair share contribution of 26 percent¹² to this improvement. The Applicant's fair share contribution shall be paid prior to issuance of a certificate of occupancy.*

Implementation of MM TR-1 would improve the Year 2008 level of service at the PCH and Warner Avenue intersection, under the City criteria, from LOS E and LOS F during the A.M. and P.M. peak hours,

¹¹ Fair share calculation is provided in Appendix H, Traffic Impact Analysis Report.

¹² Ibid.

respectively, to LOS C and LOS D. Under the State of California Methodology, this mitigation measure would improve the Year 2008 level of service at the PCH and Warner intersection from LOS F during both the A.M. and P.M. peak hours to LOS D. This intersection improvement is currently under study by the County of Orange. Feasibility of implementing this improvement has not been determined at this time. In addition, the ultimate implementation of this measure is not under the discretion of the City of Huntington Beach.

Under the State of California Methodology, MM TR-2 would improve the Year 2008 level of service at the PCH and Seapoint Avenue intersection from LOS E during the P.M. peak hour to LOS D, while the recommended intersection improvement under MM TR-2 would also serve to offset the impact of the proposed project traffic during Year 2020 at the intersection of PCH and Seapoint Avenue during the P.M. peak hour. Although implementation of MM TR-2 would improve the Year 2008 level of service at this intersection to an acceptable level, it would only reduce the ICU at this intersection by 0.045 during Year 2020. As such, this intersection would still remain at LOS E in Year 2020 upon implementation of MM TR-2. However, the resulting ICU after implementation of MM TR-2 would be reduced below that of the Year 2020 baseline conditions, and intersection operations would be within City thresholds. Therefore, the impact at this intersection from operation of the proposed project in Year 2020 would be reduced to a less-than-significant level. The Applicant would contribute its fair share of 26 percent to this improvement, and the City would be obligated to implement this intersection improvement.

The Downtown Specific Plan EIR identified significant impacts to circulation. The impacts to specific intersections were not identified, and these impacts are defined and clarified in this EIR. However, the significant effect on traffic as previously identified in EIR 82-2, in addition to the Statement of Overriding Considerations prepared on that EIR (City Resolution No. 5284) is noted. The impact identified under Impact TR-1 would be significant and unavoidable because implementation of MM TR-1 may not be feasible and implementation of this measure is not under the discretion of the City of Huntington Beach. The impact on the intersection of PCH and Seapoint in Years 2008 and 2020, as discussed under Impact TR-2 and Impact TR-4, respectively, resulting from the proposed project would be less than significant upon implementation of MM TR-2.

The following mitigation measure would be required to address impacts associated with the need for a new traffic signal, as described above under Impact TR-6.

<i>MM TR-3</i>	<i>Install a traffic signal at First Street and Atlanta Avenue prior to issuance of occupancy permits. The City shall ensure completion of this improvement, and the</i>
----------------	--

Applicant shall contribute a fair share contribution of 57 percent¹³ to the improvement.

Implementation of MM TR-3 would ensure efficient traffic flow at the intersection of First Street and Atlanta Avenue. Impact TR-6 would be reduced to less than significant.

All other impacts to transportation, as described under Impacts TR-3, TR-5, and TR-7 through TR-11 would be less than significant, as discussed under project impacts.

¹³ Ibid.